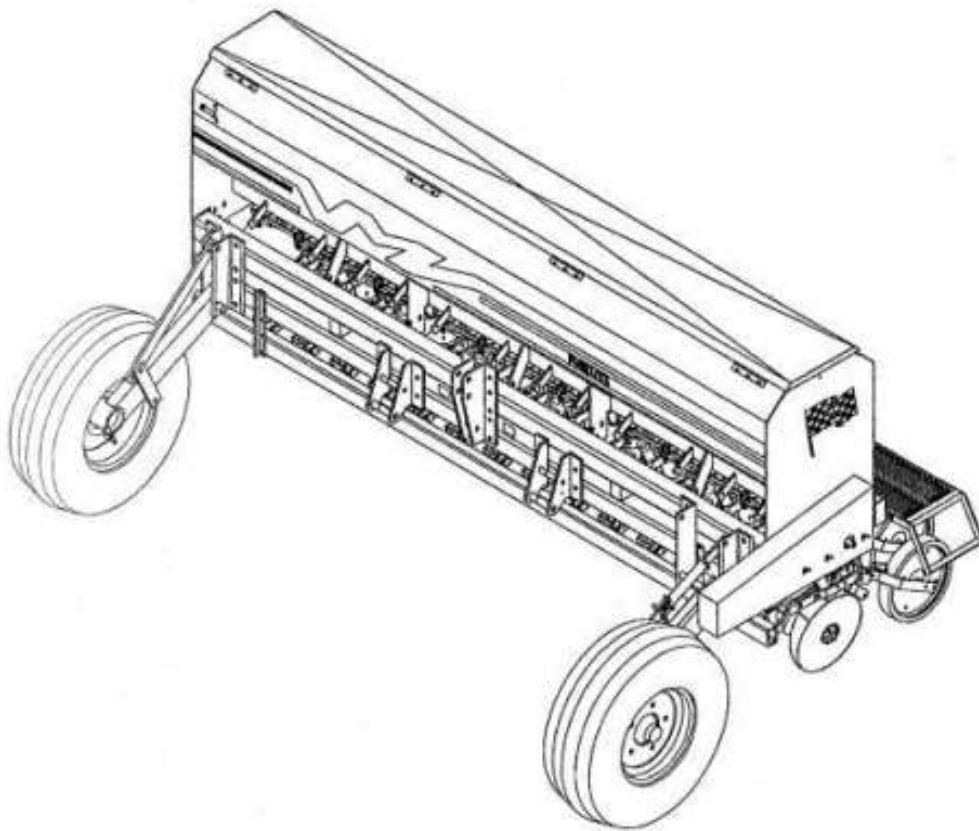




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The Emerging Winner

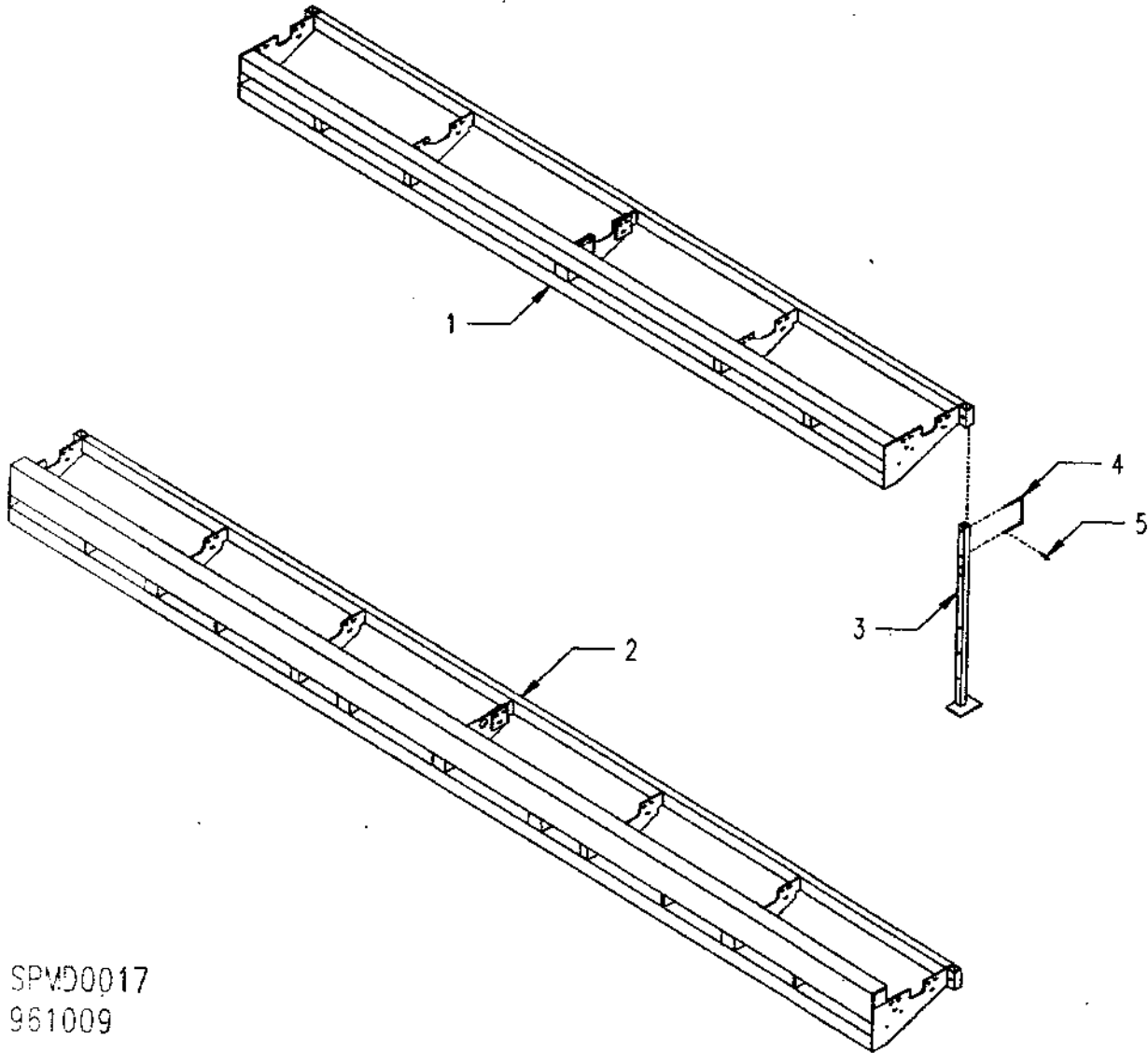


Soybean & Grain Drill
Installation and Parts Manual
Our Tradition is Quality Driven and Field Proven

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MAIN FRAMES



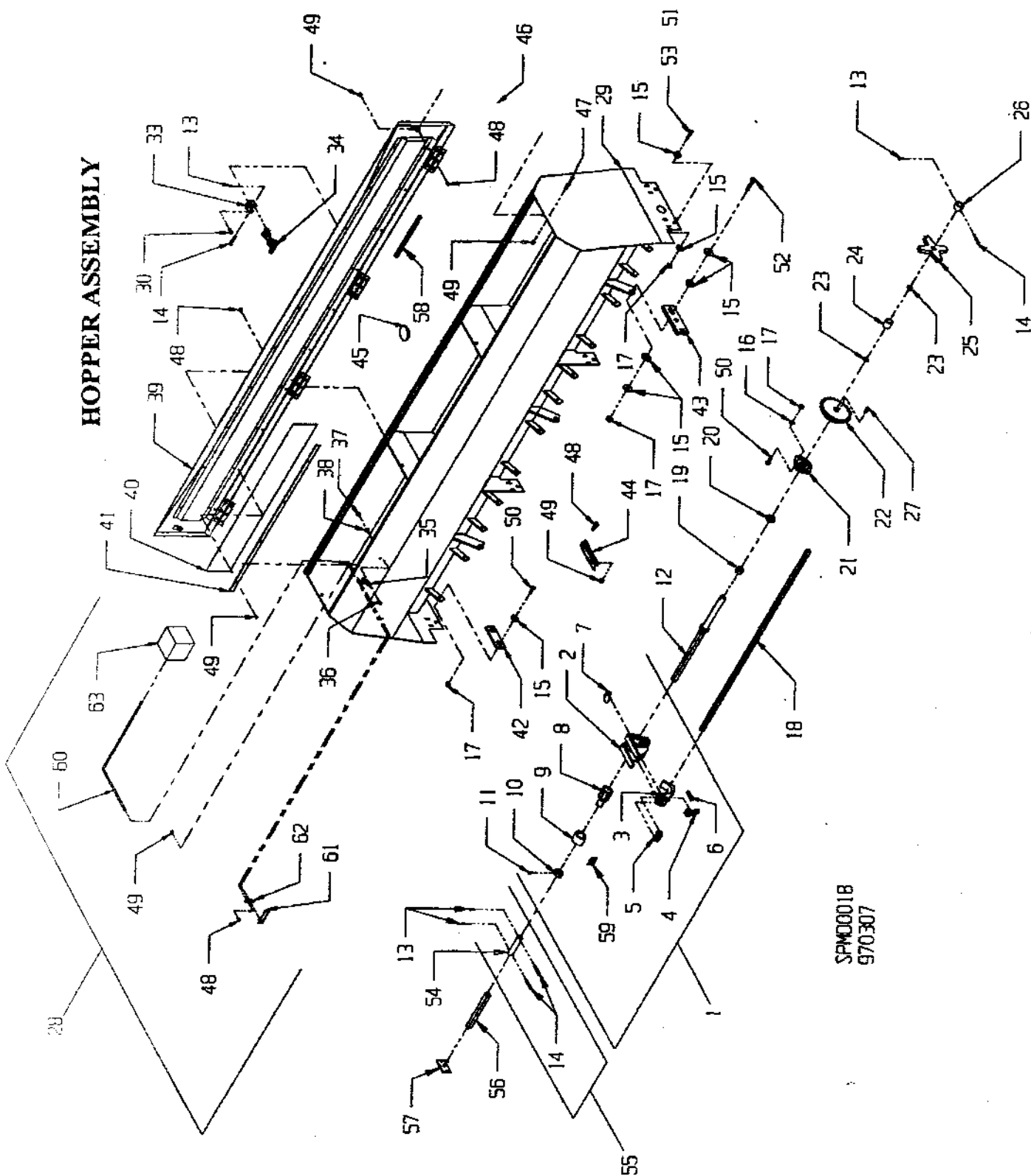
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REF. #	PART #	QTY REQ'D	DESCRIPTION
1	520994	1	5' Main Frame - Not Shown
1	520037	1	7' Main Frame - Not Shown
1	520295	1	10' Main Frame - Not Shown
1	520755	1	12' Main Frame - Not Shown
1	520038	1	14' Main Frame - Shown
1	520290	1	15' Main Frame - Not Shown
2	520574	1	20' No-Till And Pull Type Main Frame - Shown
2	520040	1	27' Main Frame - Not Shown
3	521129	2	Parking Stand
4	126143	2	Hand Grip
5	604018	2	Small Hair Pin

HOPPER ASSEMBLY

REF. #	PART #	QTY	DESCRIPTION	REF. #	PART #	QTY	DESCRIPTION
1	522002	A/R	Meter Assembly (Items 2-11)	35	322002	A/R	Anchor Bracket - Lid Latch
2	522037	1	Meter Housing With Plastic Insert	36	601002	A/R	# 10 X 1/2" Bolt
3	820001	1	Cleanout Arm	37	600017	A/R	# 10 Hex Nut
4	820002	1	Cleanout Finger	38	602020	A/R	# 10 Lock Washer
5	820003	2	Bushing	39	521045	1	Hopper Lid 5'
6	720004	1	Spring	39	521155	1	Hopper Lid 6' RH
7	820004	1	Wiper	39	521155	1	Hopper Lid 6' LH
8	820005	1	Feed Roller	39	521156	1	Hopper Lid 6 1/2'
9	820006	1	Roller Bushing	39	521189	1	Hopper Lid 6 1/2' RH
10	325004	1	Lock Collar	39	521189	1	Hopper Lid 6 1/2' LH
11	601097	1	1/4" 20 Set Screw X 1/2" Long	39	521157	1	Hopper Lid 7 1/2' RH
12	521159	1	Meter Drive Shaft (5')	39	521157	1	Hopper Lid 7 1/2' LH
12	521160	1	Meter Drive Shaft (6')	39	521158	1	Hopper Lid 10'
12	520333	1	Meter Drive Shaft (End Hopper 6 1/2')	39	521190	1	Hopper Lid 10' RH
12	520293	1	Meter Drive Shaft (7 1/2')	39	521190	1	Hopper Lid 10' LH
12	520321	1	Meter Drive Shaft (10')	40	624151	1	Canvas Strip 5'
13	604081	A/R	Cotter Pin 3/32" X 1/2"	40	624152	1	Canvas Strip 6'
14	624013	A/R	Coupling Pin	40	624153	1	Canvas Strip 6 1/2'
15	602009	A/R	3/8" Flat Washer	40	624154	1	Canvas Strip 7 1/2'
16	602005	A/R	3/8" Lock Washer	40	624155	1	Canvas Strip 10'
17	600012	A/R	3/8" Lock Nut	41	124259	1	Canvas Clamp 5'
18	128074	2	Meter Kickout Shaft (5')	41	124260	1	Canvas Clamp 6'
18	128052	2	Meter Kickout Shaft (6')	41	124261	1	Canvas Clamp 6 1/2'
18	128024	2	Meter Kickout Shaft (6 1/2')	41	124262	1	Canvas Clamp 7 1/2'
18	128022	2	Meter Kickout Shaft (7 1/2')	41	124263	1	Canvas Clamp 10'
18	128024	3	Meter Kickout Shaft (10')	42	120006	A/R	Meter Kickout Shaft Support
19	600025	1	3/4" - 16 Nut	43	120054	A/R	Meter Kickout Shaft Lever
20	305002	1	DDO Spacer	44	124001	A/R	Meter Mount Bracket
21	702029	1	Flush Mounted Bearing	45	1250068	A/R	2" Metal Plug
22	325002	1	40-B 28 Sprocket	46	624014	2	# 4 Chain, 14 1/2" Long
23	602013	3	3/4" SAE Flat Washer	47	601015	2	1/4" X 3/4" Bolt
24	123010	1	1" Spacer	48	601031	A/R	1/4" X 1/2" Bolt
25	120009	1	Meter Adjustment Knob	49	600008	A/R	1/4" Lock Nut
26	123158	1	Stop - Collar Meter Shaft	50	601047	A/R	3/8" X 1" Bolt
27	128001	1	1/4" Key	51	601025	A/R	3/8" X 1 1/4" Bolt
28	522714	1	Empty / Full Indicator	52	601006	2,2,3	3/8" X 1 1/2" Bolt (6 1/2', 7 1/2', 10')
29	521044	1	5' Hopper	53	601024	A/R	3/8" X 1 3/4" Bolt (6 1/2' Hopper Only)
29	521150	1	6' Hopper RH	53	601034	6	3/8" X 2" Bolt (7 1/2' Hopper Only)
29	521184	1	6' Hopper LH	54	123016	A/R	Drive Shaft Coupling (14' P.T. 20', 27', Drill)
29	521152	1	6 1/2' Hopper	55	522005	A/R	Coupling Assy (Items 13,14,54) (14' P.T. 20', 27' Drill)
29	521185	1	6 1/2' Hopper RH	56	128009	1	Meter Drive Shaft (27' Center Hopper, 14' P.T.Hopper)
29	521186	1	6 1/2' Hopper LH	56	128051	1	Meter Shaft Right Hand (12')
29	521153	1	7 1/2' Hopper RH	56	128020	1	Meter Shaft Right Hand (14')
29	521183	1	7 1/2' Hopper LH	56	128020	1	Meter Shaft Right Hand (15')
29	521154	1	10' Hopper	57	522749	1	Meter Shaft Stop
29	521187	1	10' Hopper RH	58	821014	A/R	Protective Trim
29	521188	1	10' Hopper LH	59	220035	A/R	Calibration Sticker
30	601012	A/R	5/16" X 5/8" Bolt	60	521180	1	Indicator Rod
31	602003	A/R	5/16" Lock Washer	61	521024	1	Pointer
32	600010	A/R	5/16" Hex Nut	62	702064	1	Bearing Assembly
33	322003	A/R	Mounting Bracket Lid Latch	63	323004	1	Indicator Float Block
34	821001	A/R	Lid Latch - Rubber				

HOPPER ASSEMBLY

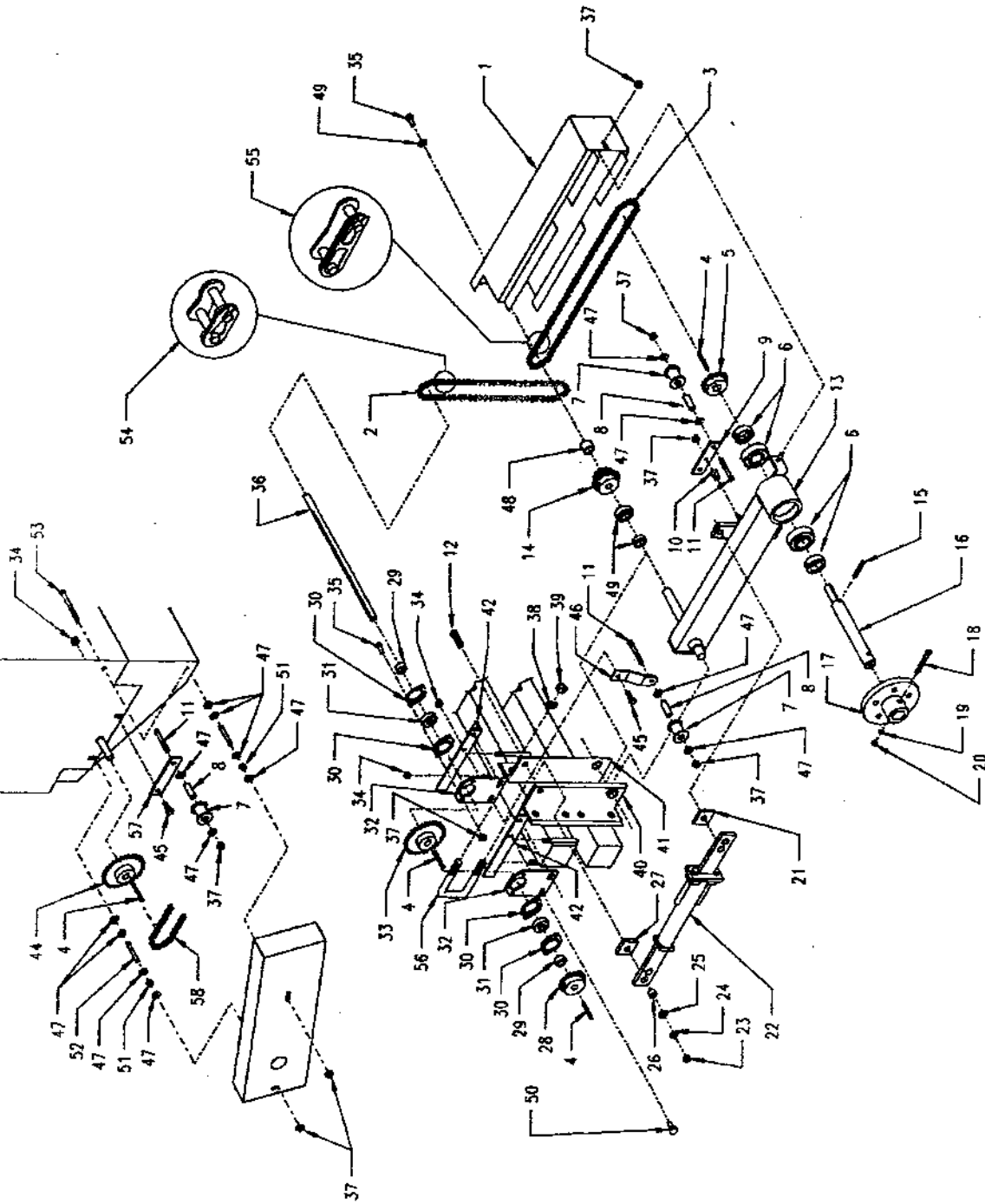


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PARTS LIST FOR LIVE AXLE DRIVE

REF #	PART #	QTY	DESCRIPTION	REF #	PART #	QTY	DESCRIPTION
1	520947	1	Lower Chain Guard - L.H.	34	600059	8	7/16" Flange Lock Nut
1	521235	1	Lower Chain Guard - R.H.	35	601047	5	3/8" X 1" Bolt
2	624140	1	Chain (# 40 X 50" Long)	36	126141	1	Sprocket Shaft (Plated)
3	624139	1	Chain (# 20 - 40 X 60" Long)	37	600043	10	3/8" Flange Lock Nut
4	128911	3	Keystock 1/4" SQ. X 2 5/8"	38	602006	4	3/4" Lock Washer
5	325063	1	Sprocket 1" ID - 19 Tooth	39	600004	4	3/4" Hex Nut
6	702061	2	Bearing With Lock Collar - 1 1/2" ID	40	521052	1	Drive Arm Hitch RH (10,12,14, & 15" Conv.)
7	400015	3	Chain Roller	40	521053	1	Drive Arm Hitch RH (27" Conv.) N/S
8	123626	3	Bushing - 3/8" ID X 2"	40	521054	1	Drive Arm Hitch RH (10,12,14,15, & 20" No-Till)
9	121294	1	Chain Roller Bracket	40	122065	1	Drive Arm Hitch RH (30" 3-Section Drill) N/S
10	123623	1	Bushing 7/16" ID X 1"	41	521049	1	Drive Arm Hitch LH (10,12,14, & 15" Conv.)
11	601084	3	3/8" X 3" Bolt	41	521050	1	Drive Arm Hitch LH (27" Conv.) N/S
12	601069	2	5/8" X 2 1/2" Bolt	41	521051	1	Drive Arm Hitch LH (10,12,14,15, & 20" No-Till)
13	520944	1	Drive Arm Weldment (RHD)	41	122066	1	Drive Arm Hitch LH (30" 3-Section Drill) N/S
14	520948	1	Sprocket Weldment	42	122054	2	Jack Shaft Bearing Hanger (R.H. Reg. L.H.-N.T.)
15	604226	1	3/8" X 2" Roll Pin	42	122053	2	Jack Shaft Bearing Hanger (L.H. Reg. R.H.-N.T.)
16	126137	1	Drive - Wheel Spindle	43	520945	1	Upper Chain Guard Weldment
17	520946	1	Drive - Wheel Hub	44	325002	1	Sprocket - 28 Tooth, 3/4" ID
18	601029	1	7/16" X 3" Bolt	45	601014	1	7/16" X 1 1/2" Bolt
19	602012	1	7/16" Lock Nut	46	120246	1	Idle Arm
20	600007	1	7/16" Hex Nut	47	602009	17	3/8" Flat Washer
21	120494	1	1/4" Spacer	48	702063	1	Needle Bearing - 1" ID
22	522421	1	Floating Drive Arm	49	702062	1	Bearing with Lock Collar - 1" ID
23	600014	2	5/8" Hex Nut	50	601033	3	7/16" X 1 1/4" Bolt
24	602015	2	5/8" Lock Washer	51	600003	2	3/8" Hex Nut
25	602016	2	5/8" Flat Washer	52	123625	2	3/8" X 3" Spacer
26	123068	2	Bushing - 5/8" ID	53	601089	2	3/8" X 4 1/2" Bolt
27	120498	1	1/2" Spacer	54	624003	1	# 40 Connecting Link
28	325001	1	Sprocket - 19 Tooth, 3/4" ID	55	624004	1	# 20 - 40 Connecting Link
29	702021	2	Eccentric Lock Collar	56	624010	2	U-Bolt 3/4" X 3 1/2" X 5" Long
30	105018	4	2 - Hole Flangette	56	604028	2	U-Bolt 3/4" X 7" X 5 1/2" Long
31	702002	2	Self - Aligning Bearing	57	121458	1	Idle Arm - Hopper (Conventional)
32	100151	2	Bearing Holder	57	120245	1	Idle Arm - Hopper (No-Till)
33	325003	1	Sprocket - 32 Tooth, 3/4" ID	58	624150	1	Chain (# 20 - 40) As Required

PARTS LIST FOR LIVE AXLE DRIVE



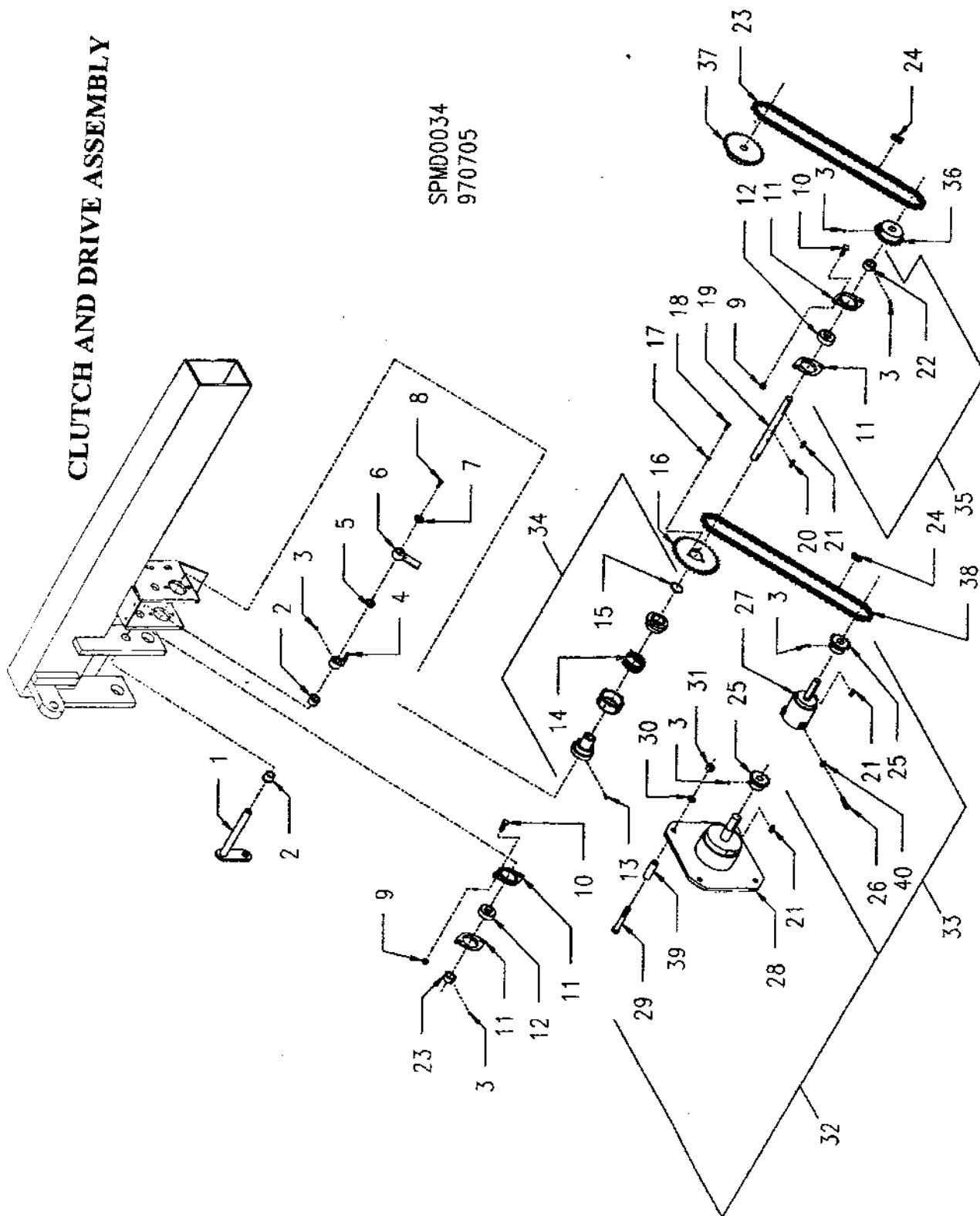
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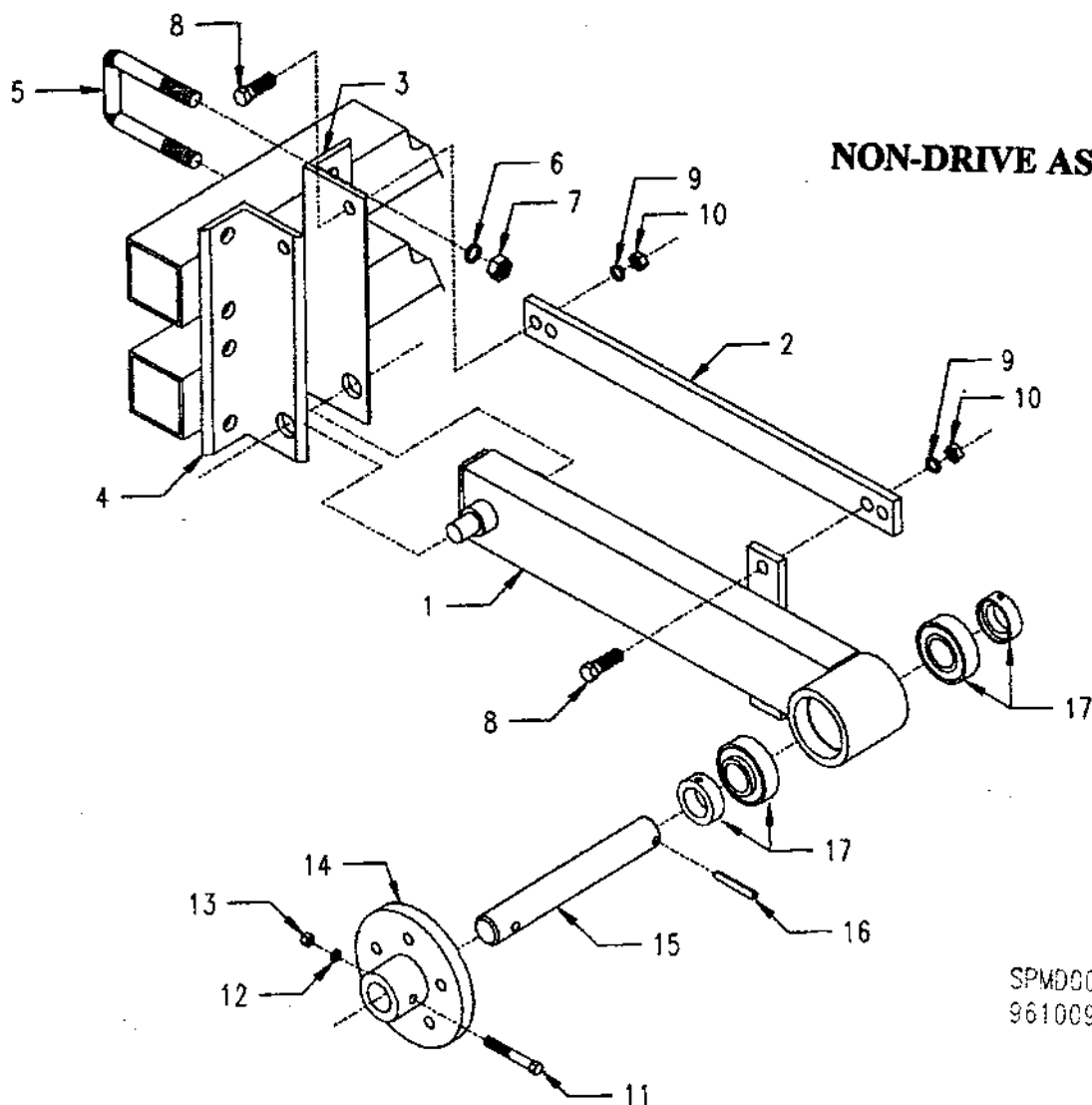
CLUTCH AND DRIVE ASSEMBLY

REF #	PART #	QTY	DESCRIPTION
1	520068	1	Clutch Engaging Shaft
2	125006	2	Oiliate Bushing
3	601096	A/R	1/4" - 20 Set Screw 1/4" Long
4	520073	1	Clutch Finger Stop
5	720006	1	Torsion Spring L.H.
5	720005	1	Torsion Spring R/H.
6	520070	1	Clutch Finger
7	120129	1	Retainer Clutch Finger
8	601112	1	1/4" X 3/4" Flat Head Screw
9	600012	4	3/8" Lock Nut
10	601047	4	3/8" X 1" Bolt
11	105018	4	2 - Hole Flangette
12	702002	2	Self Aligning Bearing
13	601097	1	1/4" - 20 Set Screw, 1/2" Long
14	720008	1	Drive Spring L.H.
14	720009	1	Drive Spring R.H.
15	624031	1	Retaining Ring
16	325006	1	40 - A 32 Sprocket
17	602002	3	1/4" Lock Washer
18	601067	3	1/4" X 5/8" Bolt
19	126013	1	Clutch Shaft
20	128013	1	3/16" Key
21	128001	2	1/4" Sq. Key
22	702021	2	Bearing Lock Collar
23	624036	1	# 20 - 40 Chain 57 Links
24	624004	2	# 20 - 40 Connector Links
24	624006	2	# 20 - 40 Offset Link
25	325005	2	40 - B 13 Sprocket
26	601134	3	3/8" X 1 1/4" SQ. Head Set Screw
27	520009	1	Drive Hub (5 Bolt, 82 Model) (PT-5', 7', 10', 12', 14'; PTINT-7')
27	520133	1	Drive Hub (8 Bolt, 82 Model) (15' PTINT, 20' PTINT)
28	520074	1	Drive Plate (82' Model) (PT-15' & 20'; PTINT-10', 14' Not Shown)
28	520316	1	Drive Hub (83 Model) (PT-5', 7', 10', 12', 14', 15', 20'; PTINT-5', 7', 10', 12', 14')
28	521280	1	Drive Plate, (97 Model) (All PT & PTINT)
29	601111	4	1/2" X 5" Carriage Bolt (6 Bolt Hub, 82 Model)
29	601140	4	1/2" X 3 1/4" Carriage Bolt
30	601041	4	1/2" X 1 1/4" Bolt (5 - Bolt, 83 Model)
31	602007	4	1/2" Lock Washer
32	600006	4	1/2" Lock Nut
32	522066	A/R	Drive Plate Assembly (6 Bolt Hub, 82 Model) (Items 3, 24, 8, 31-34)
33	522379	A/R	Drive Hub Assembly (5 Bolt 83 Model) (Items 3, 24, 28, 31-34)
33	522380	A/R	Drive Hub Assembly (6 Bolt 83 Model) (Items 3, 24, 28, 31-34, 42)
33	522001	A/R	Drive Hub Assembly (5 Bolt 82 Model) (Items 3, 24, 28-30, 42)
34	522084	A/R	Drive Hub Assembly (8 Bolt 82 Model) (Items 3, 24, 28-30, 42)
34	522056	A/R	Clutch Assembly L.H. (Shown) (Items 13-18)
35	522055	A/R	Clutch Assembly R.H. (Not Shown) (Items 13-18)
36	502109	A/R	Self - Aligning Bearing Assembly
37	325001	1	40 - B 19 Sprocket
38	325002	1	40 - B 28 Sprocket
39	624026	1	# 20 - 40 Drive Chain 61 Links
40	123195	4	2" Spacer
*	600003	3	3/8" Hex Nut
*	325003	1	40-B 32 Sprocket
*	325016	1	40-B 48 Sprocket
	502145	A/R	Bearing & Lock Collar Assembly (Items 3, 12, 25)

CLUTCH AND DRIVE ASSEMBLY

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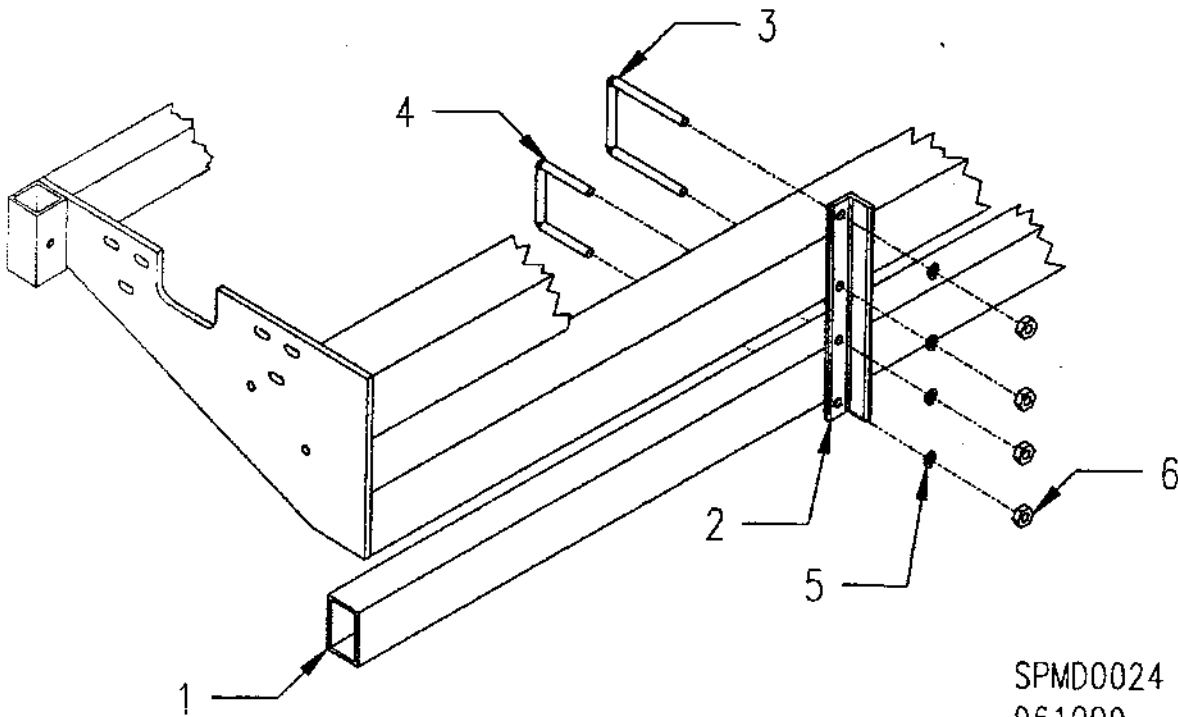




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REF #	PART #	QTY	DESCRIPTION
1	520993	1	Non-Drive Arm
2	120019	1	Non-Drive Wheel Strap
3	521049	1	Drive Arm Hitch L.H. (10', 12', 14', & 15' Conv. Drills)
3	122057	1	Drive Arm Hitch L.H. (10', 12', 14', 15', & 20' Conv. Drills) Not Shown
3	521050	1	Drive Arm Hitch L.H. (27' Conv. Drills) - Not Shown
3	521051	1	Drive Arm Hitch L.H. (10', 12', 14', 15', & 20' No-Till) -Not Shown
3	122065	1	Drive Arm Hitch L.H. (30' 3-Section Drill) - Not Shown
4	521052	1	Drive Arm Hitch R.H. (10', 12', 14', 15' Conv. Drills)
4	521053	1	Drive Arm Hitch R.H. (27' Conv. Drills) Not Shown
4	521054	1	Drive Arm Hitch R.H. (10', 12', 14', 15', & 20' No-Till) Not Shown
4	122066	1	Drive Arm Hitch R.H. (30' 3-Section Drill) - Not Shown
5	624010	4	3/4" X 3 1/2" U-Bolt, 5" Long
5	604028	2	3/4" X 7" U-Bolt, 5 1/2" Long - Not Shown
6	602006	8	3/4" Lock Washer
7	600004	8	3/4" Hex Nut
8	601108	2	5/8" X 1 3/4" Bolt
9	602015	2	5/8" Lock Washer
10	600016	2	5/8" Lock Nut
11	601029	1	7/16" X 3" Bolt
12	602012	1	7/16" Lock Washer
13	600007	1	7/16" Hex Nut
14	520946	1	Drive Wheel Hub
15	126138	1	Wheel Spindle
16	604226	1	3/8" X 2" Roll Pin
17	702061	2	Bearing With Lock Collar

UNIT RAILS



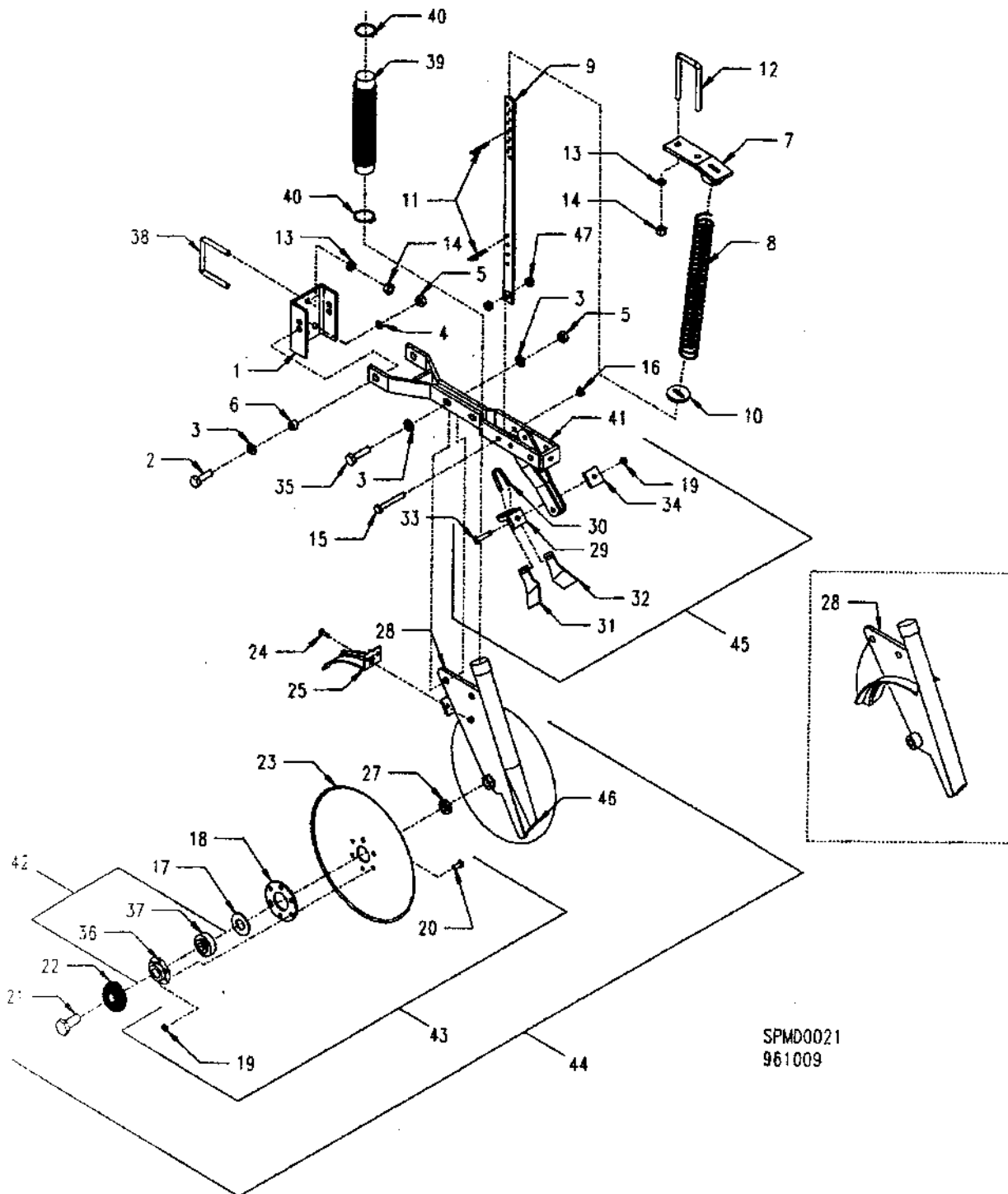
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REF. #	PART #	QTY	DESCRIPTION
1	123780	1	Unit Rail - 5' Grain Drill
1	123028	1 & 2	Unit Rail - 7' And 14' Grain Drill
1	123029	1 & 2	Unit Rail - 10' And 20' Grain Drill
1	123467	1	Unit Rail - 12' Grain Drill
1	123155	2	Unit Rail - 15' Grain Drill
1	123159	1	Unit Rail - 20' Grain Drill On 40 F. H.
1	123030	2	Unit Rail - 27' Grain Drill
2	122005	6,8,12,16	Rail Hanger (10') (14' & 15') (20') (27')
3	624009	A/R	7/16" X 3 1/2" U-Bolt, 4 1/2" Long
4	624008	A/R	7/16" X 3" U-Bolt, 3" Long
5	202012	A/R	7/16" Lock Washer
6	600011	A/R	7/16" Lock Nut

OPENER ASSEMBLY

REF. #	PART #	QTY	DESCRIPTION
1	120233	1	Unit Hitch
2	601009	2	1/2" X 1 1/2" Bolt
2	601011	2	1/2" X 1 3/4" Bolt (No-Till Hitch)
3	602008	6	1/2" Flat Washer
4	602007	2	1/2" Lock Washer
5	600006	4	1/2" Lock Nut
6	103002	2	Med. Swivel Spacer
7	521230	1	Spring Bracket 11((Long opener)
7	521231	1	Spring Bracket 22((Short opener)
8	720021	1	Down Pressure Spring - 40 lb
8	720022	1	Down Pressure Spring - 80 lb
9	521137	1	Down Pressure Spring Rod
10	120029	1	Spring Seat
11	604057	2	Large Hair Pin
12	624012	1	7/16" X 2" U-Bolt, 4 1/4" Long
13	602012	4	7/16" Lock Washer
14	600011	4	7/16" Lock Nut
15	601163	1	1/2" X 4" Bolt
16	600006	1	1/2" Lock Nut
17	602019	2	Machine Bushing 2 1/8" O.D.
18	105009	2	Bearing Plate
19	600009	13	5/16" Lock Nut
20	601019	12	5/16" X 3/4" Bolt
21	601054	2	3/4" X 1 3/4" Bolt
22	124023	2	Dust Shield
23	701010	2	13" Disc Blade
24	601015	2	1/4" X 3/4" Bolt
25	520384	1	Blade Guard
26	600008	2	1/4" Lock Nut
27	305002	2	Bearing Spacer
28	521166	1	213 Offset Min. Till Left Hand Opener Body
28	521175	1	213 Offset Min. Till Right Hand Opener Body
28	520001	1	Opener Body - Standard
28	520346	1	Opener Body - Supplemental R.H. (40' Folding Transport System Only)
28	520347	1	Opener Body - Supplemental L.H. (40' Folding Transport System Only)
29	322004	1	Mounting Bracket Inside Scraper
30	720010	1	Spring - Inside Scraper
31	120272	1	Scraper Blade - L.H.
32	120271	1	Scraper Blade - R.H.
33	601125	1	5/16" X 2 1/4" Carriage Bolt
34	120420	1	Bolt Plate 1 1/2" SQ. X 1/4"
35	601013	2	1/2" X 2" Bolt
36	105019	2	Bearing Housing
37	702020	2	Bearing
38	624008	1	7/16" X 3" U-Bolt 3" Long
39	801013	1	Rubber Seed Tube
40	604013	2	Seed Tube Clamp
41	520034	1	Unit Frame Long
41	520033	1	Unit Frame Short
42	522210	2	Bearing Assembly, (Item 36 & 37)
43	522045	2	Disc. Blade Assembly (Items 17-20 & 23,42)
44	522025	1	Disc. Opener Assembly, (Items 17 - 28 & 42)
44	522435	1	Disc. Opener Assembly Supplemental R.H. (Items 17-28,42)
44	522436	1	Disc. Opener Assembly Supplemental L.H. (Items 17-28,42)
45	522168	1	Inside Scraper Assembly (Item 19 & 20 -34 Includes Bolts)
46	123006	1	Metal Seed Tube
47	103004	2	Bushing
*	522009	1	D/P Spring Assembly w/ Hardware (Items 7-16) Long 40lb
*	522017	1	D/P Spring Assembly w/ Hardware (Items 7-16) Short 40lb.
*	522150	1	D/P Spring Assembly w/ Hardware (Items 7-16) Long 80lb.
*	522151	1	D/P Spring Assembly w/ Hardware (Items 7-16) Short 80lb.

OPENER ASSEMBLY

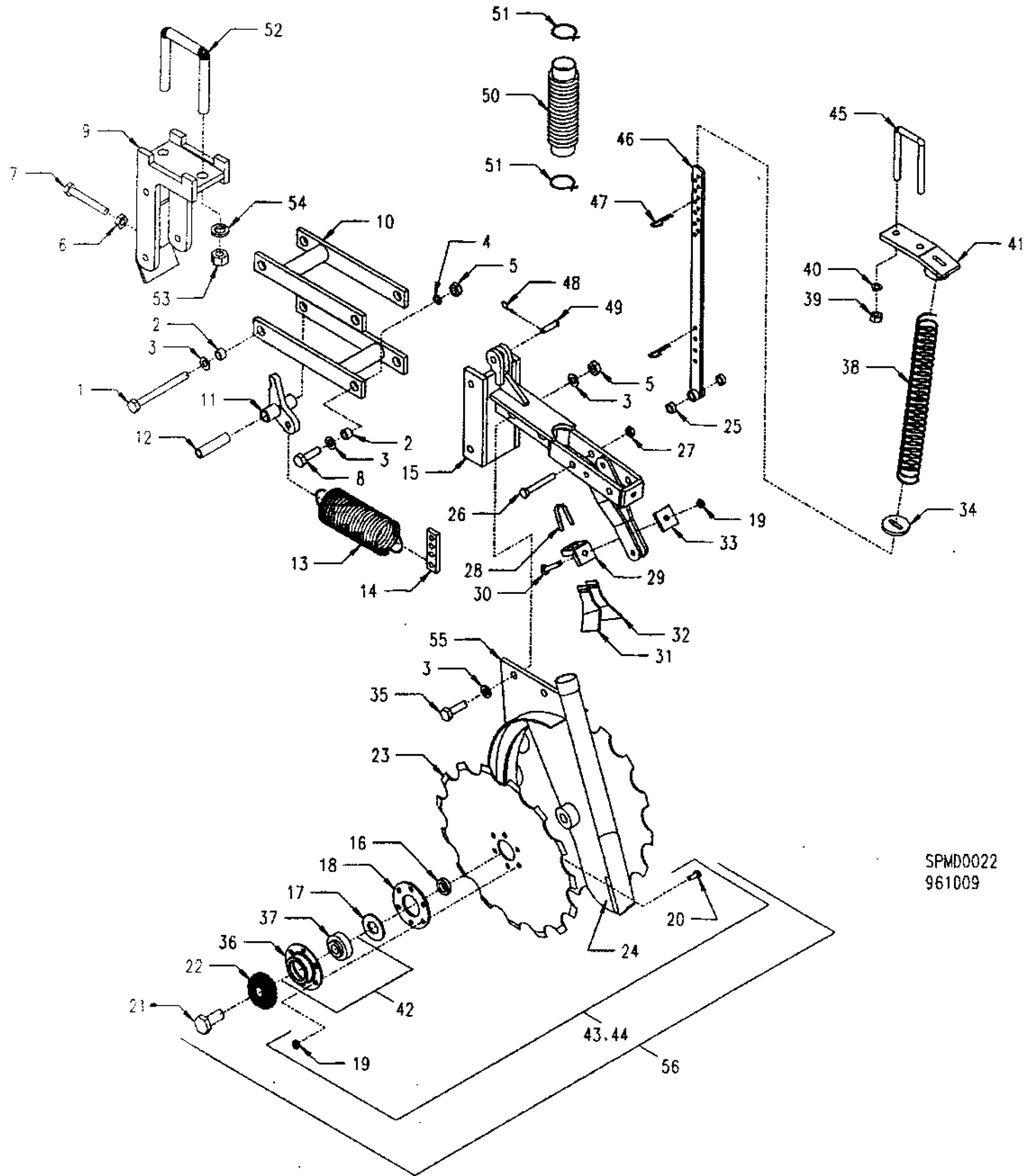


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15" NOTCHED OFFSET OPENER

ITEM #	PART #	QTY	DESCRIPTION	ITEM #	PART #	QTY	DESCRIPTION
1	601116	1	1/2" X 5 1/2" Bolt	29	322004	1	Mounting Bracket, Inside Scraper
2	103003	8	Medium Swivel Spacer	30	601125	1	5/16" X 2 1/2" Carriage Bolt
3	602008	12	1/2" Flat Washer	31	120272	1	Scraper Blade, LH
4	602007	6	1/2" Lock Washer	32	120271	1	Scraper Blade, RH
5	600006	9	1/2" Lock Nut	33	120420	1	Bolt Plate
6	600031	1	1/2" Jam Nut	34	120029	1	Spring Seat
7	601212	1	1/2" X 3 1/2" Full Threaded Bolt	35	601013	2	1/2" X 2" Bolt
8	601011	6	1/2" X 1 3/4" Bolt	36	105019	2	Bearing Housing
9	520795	1	Hitch, Long, Parallel DDO	37	702020	2	Bearing
9	520796	1	Hitch, Short, Parallel DDO (Shown)	38	720007	1	80 lb. Down Pressure Spring
10	520798	2	Parallel Link, DDO	39	600011	2	7/16" Lock Nut
11	520797	1	Rocker Arm	40	602012	2	7/16" Lock Washer
12	123499	1	Bushing, Rocker Arm	41	520035	1	Down Pressure Spring Bracket, 11 deg
13	700012	1	Coulter Spring	41	520036	1	Down Pressure Spring Bracket, 22 deg
14	121139	1	Down Pressure Strap, 15" DDO	42	522210	2	Bearing Assembly (Items 36 & 37)
15	520794	1	Unit Frame, 15" DDO	43	522654	1	Disc Blade Assembly, 11 Notches (Items 17-20,23,42)
16	305002	4	Bearing Spacer	44	522655	1	Disc Blade Assembly, 15 Notches (Items 17-20,23,42)
17	602019	2	Machine Bushing, 2 1/8" OD	45	624012	1	7/16" X 2" U-Bolt, 4 1/2" Long
18	105009	2	Bearing Plate	46	521137	1	Spring Rod
19	600009	14	5/16" Lock Nut	47	604057	2	Large Hair Pin
20	601019	12	5/16" X 3/4" Bolt	48	604018	1	Small Hair Pin
21	601091	2	3/4" X 2" Bolt	49	604038	1	3/8" X 1 1/2" Headed Pin
22	124023	2	Dust Shield	50	801013	1	Seed Tube
23	701024	1	15" Disc Blade, 11 Notch	51	604013	2	Seed Tube Clamp
23	701025	1	15" Disc Blade, 15 Notch	52	624010	1	3/4" X 3 1/2" U-Bolt, 5" Long
24	121118	1	Frog, 15" DDO	53	600004	2	3/4" Hex Nut
25	103004	2	Swivel Spacer	54	602006	2	3/4" Lock Washer
26	601163	1	1/2" X 4" Bolt	55	520793	1	15" DDO Body
27	600006	1	1/2" Lock Nut	56	522653	1	15" Scalloped DDO Assy. (Items 16,19,21,22,24,25,43,44,55)
28	720010	1	Spring, Inside Scraper				

15" NOTCHED OFFSET OPENER

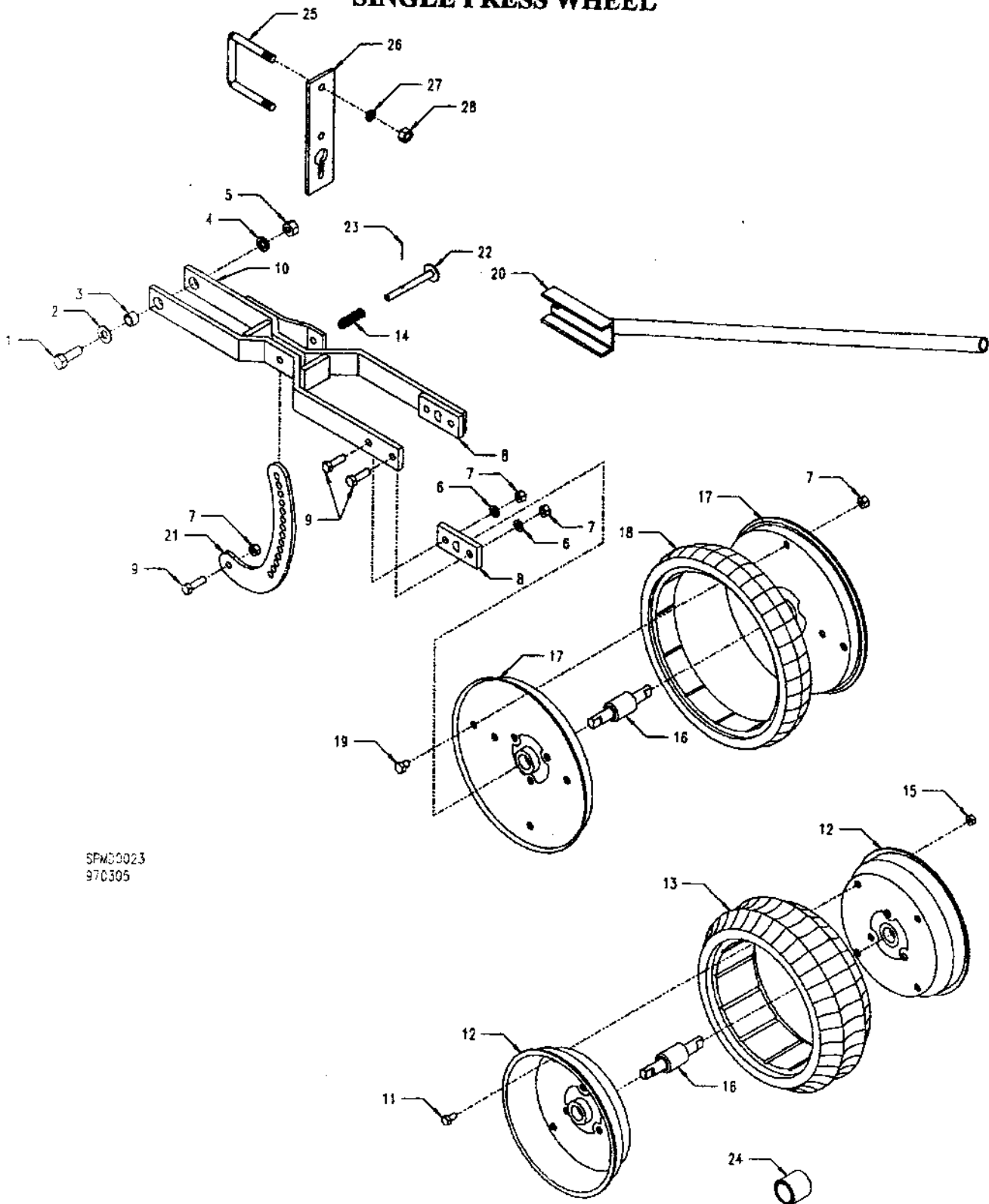


SPMD0022
961009

SINGLE PRESS WHEELS

REF. #	PART #	QTY	DESCRIPTION
1	601163	1	1/2" X 4" Bolt
2	602008	2	1/2" Flat Washer
3	103002	2	Bushing
4	602007	1	1/2" Lock Washer
5	600006	1	1/2" Lock Nut
6	602005	4	3/8" Lock Washer
7	600012	5	3/8" Lock Nut
- 8	120036	2	Press Wheel Retainer
9	601025	5	3/8" X 1 1/4" Bolt
10	521136	1	4 X 12 Wheel Frame
10	521135	1	2 X 13 Wheel Frame
10	521134	1	4 X 16 Wheel Frame
10	521162	1	2 X 13 & 1 X 12 Single Arm Press Wheel Frame
11	601012	7	5/16" X 5/8" Bolt
12	300003	2	4 X 12 Wheel Half
12	300005	2	4 X 16 Wheel Half
13	801009	1	4 X 12 Tire (Double Rib)
13	801020	1	4 X 16 Tire (Double Rib)
13	801004	1	4 X 12 Tire (Smooth Crown)
13	801001	1	4 X 16 Tire (Smooth Crown)
13	801018	1	4 X 12 (Center Rib)
14	700021	1	Press Wheel Adjustment Spring
15	600009	7	5/16" Lock Nut
16	702017	1	Bearing
17	300006	2	2 X 13 Wheel Half
18	801010	1	2 X 13 Tire (Smooth)
18	801015	1	2 X 13 Tire (Center Rib)
18	801043	1	1 X 12 Tire (Smooth)
19	601113	7	3/8" X 1/2" Bolt
20	521133	1	Press Wheel Adjustment Handle
21	124255	1	Press Wheel Adjustment Strap
22	521132	1	Adjustment Pin
23	604251	1	5/32" X 1" Cotter Pin
24	325017	1	Bushing For 4 X 16 Press Wheel Bearing
25	624008	1	7/16" X 3" X 3 1/4" U-Bolt
26	121329	1	Chain Bracket
27	602012	2	7/16" Lock Washer
28	600011	2	7/16" Lock Nut
*	522714	1	2 X 13 Frame Attach. Hdw And Strap Assy
*	522728	1	4 X 12 Frame, Attach Hdw And Strap Assy
*	522729	1	4 X 16 Frame, Attach, Hdw And Strap Assy
*	522256	1	Bearing And Bushing Assy (4 X 16 Press Wheel) (Items 16 & 24)
*	522750	1	Press Wheel Adjustment Strap Assy (Items 7, 9, 22 - 25)
*	522019	1	2 X 13 Wheel Half, Tire & Bearing Assembly - Smooth
*	522069	1	2 X 13 Wheel Half, Tire & Bearing Assembly - Center Rib
*	522003	1	4 X 12 Wheel Half, Tire & Bearing Assembly - Double Rib
*	522067	1	4 X 12 Wheel Half, Tire & Bearing Assembly - Center Rib
*	522068	1	4 X 12 Wheel Half, Tire & Bearing Assembly - Smooth
*	522252	1	4 X 16 Wheel Half, Tire & Bearing Assembly - Double Rib
*	522428	1	4 X 16 Wheel Half, Tire & Bearing Assembly - Smooth
*	522694	1	1 X 12 Wheel Half, Tire & Bearing Assembly - Single Arm
*	522695	1	1 X 12 Wheel Half, Tire & Bearing Assembly - Double Arm

SINGLE PRESS WHEEL

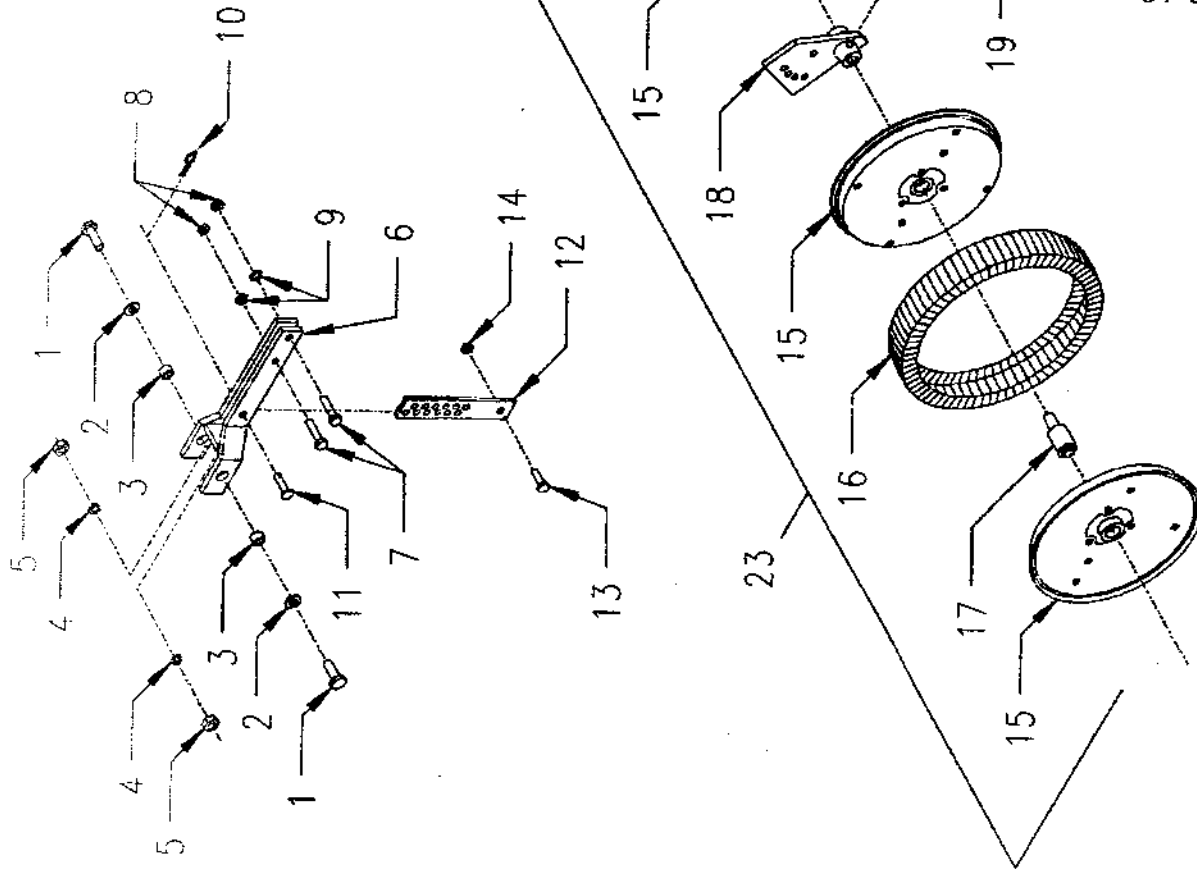


SPM00023
970305

2 X 13 DUAL PINCHER WHEEL & FRAME ASSEMBLY

REF.	PART #	QTY	DESCRIPTION
1	601009	2	1/2" X 1 1/2" Bolt
2	602008	2	1/2" Flat Washer
3	103002	2	Bushing
4	602007	2	1/2" Lock Washer
5	600006	2	1/2" Lock Nut
6	520025	1	Dual Pincher Wheel Frame
7	601024	2	3/8" X 1 3/4" Bolt
8	600012	2	3/8" Lock Nut
9	602005	2	3/8" Lock Washer
10	604018	1	Small Hair Pin
11	604058	1	3/8" X 1 1/2" Headed Pin
12	120210	1	Press Wheel Adjustment Strap
13	601025	1	3/8" X 1 1/4" Bolt
14	600012	1	3/8" Lock Nut
15	300006	4	2 X 13 Wheel Half
16	801010	2	2 X 13 Tire (Smooth)
16	801015	2	2 X 13 Tire (Center Rib)
17	702019	2	Bearing
18	520258	1	2 X 13 Dual Pincher Wheel Bracket
19	601093	2	3/8" X 3/4" SQ. Head Bolt
20	601113	14	3/8" X 1/2" Bolt
21	600012	14	3/8" Lock Nut
22	522029	2	2 X 13 Smooth Pincher Wheel Assembly
22	522128	2	2 X 13 Center Rib Pincher Wheel Assembly (Not Shown)
23	522030	1	2 X 13 Smooth Dual Wheel Pincher Assembly
23	522129	1	2 X 13 Center Rib Dual Pincher Wheel Assembly
*	522031	1	2 X 13 Smooth Dual Pincher Wheel and Frame Assembly
*	522130	1	2 X 13 Center Rib Dual Pincher Wheel and Frame Assembly
*	522122	1	2 X 13 Smooth Dual Pincher Wheel, Frame, Attachment Hdw and Strap (Items 1-21)
*	522123	1	2 X 13 Center Rib Dual Pincher Wheel, Frame, Attachment Hdw and Strap (Items 1-21)
*	522094	1	Press Wheel Adjustment Strap Assembly

2 X 13 DUAL PINCHER PRESS WHEEL

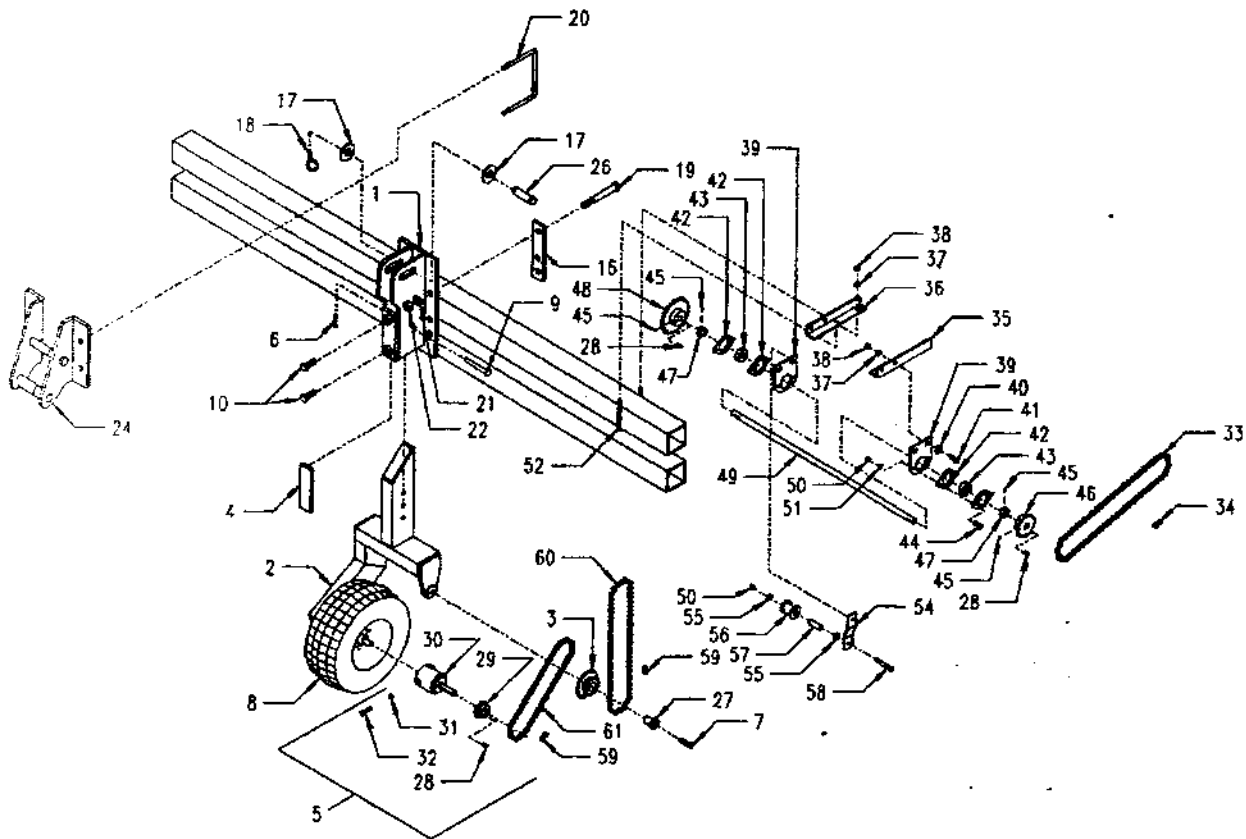


SPMD0026
961009

5' & 7' 3 PT DRIVE WHEEL

REF. #	PART #	QTY	DESCRIPTION
1	520729	1	Center Mast 7' 3 PT
2	522627	1	Drive Wheel Arm & Hub Assembly 7' 3 PT
3	522516	1	Idler Bearing Assembly
4	120621	1	Plate 1/2" X 2" X 7"
5	522001	1	Hub Assembly
6	604018	1	Small Hair Pin
7	601164	1	1/2" X 2" Flathead Set Screw
8	522517	1	Wheel & Tire 20.5L X 8, 6 PLY
9	624125	1	Clevis Pin, 1/2" X 4 1/4" U.L.
10	601108	2	5/8" X 1 3/4" Bolt
11	520428	1	Center Mast, 7' NT
12	522515	1	Drive Wheel Arm & Hub Assy. 7' NT
13	520425	1	Mounting Arm 7' NT Drive Wheel
14	522421	1	Floating Drive Wheel Arm Assembly - See Page 20
15	122065	1	Drive Angle, 7' NT
16	121037	2	Clamp Plate, 7' 3 PT
17	602039	2	1" Flat Washer
18	604043	1	7/16" Lynch Pin
19	601032	6	3/4" X 6" Bolt
20	624010	4	U-Bolt 3/4" X 3 1/2", 5" Long
21	602006	14	3/4" Lock Washer
22	600004	14	3/4" Hex Nut
23	604028	7	U-Bolt 3/4" X 7", 5 1/2" Long
24	522074	1	Lower Arm Assembly 7' 3 PT Conventional
25	522514	1	Lower Arm Assembly 7' NT - 3 PT
26	604040	1	Hitch Pin, 4"
27	126084	1	Idler Bearing Race
28	126001	1	1/4" Sq. Key X 13/16" Long
29	325005	1	13 Tooth Sprocket
30	520009	1	Drive Hub for 5 - Bolt Hub
31	600003	1	3/8" Hex Nut
32	601134	1	3/8" X 1 1/4" Sq. Head Set Screw
33	624150	A/R	# 20 - 40 Chain
34	624004	A/R	# 20 - 40 Connector Link
34	624006	A/R	# 20 - 40 Offset Link
35	122053	1	Jackshaft Bearing Hanger - L.H.
36	122054	1	Jackshaft Bearing Hanger - R.H.
37	602012	8	7/16" Lock Washer
38	600011	4	7/16" Nylon Lock Nut
39	120289	2	Bearing Holder
40	602010	4	7/16" Flat Washer
41	601033	4	7/16" X 1 1/4" Bolt
42	105018	4	2 - Hole Flangette
43	702002	2	Self - Aligning Bearing
44	601047	4	3/8" X 1" Bolt
45	601066	3	1/4" - 20 X 1/4" Set Screw
46	325001	1	40-B 19 Tooth Sprocket
47	702021	2	Eccentric Lock Collar
48	325003	1	40-B 32 Tooth Sprocket
49	126008	1	Jackshaft - 7" Drill (35")
49	126172	1	Jackshaft - 5" Drill (28 1/2")
50	600012	4	3/8" Lock Nut
51	602005	4	3/8" Lock Washer
52	624009	2	7/16" X 3 1/2" U-Bolt 4 1/2" Long
53	624028	2	7/16" X 4" U-Bolt 8" Long
54	120248	1	Idler Arm
55	602009	2	3/8" Flat Washer
56	400015	1	Chain Roller
57	123626	1	Bushing - 3/8" ID X 2"
58	601084	1	3/8" X 3" Bolt
59	624003	A/R	# 40 Connecting Link
59	624066	A/R	# 40 Offset Link
60	624149	A/R	# 40 Chain
61	624158	1	# 40 Chain - 57 Links
62	624159	1	# 40 Chain - 71 Links

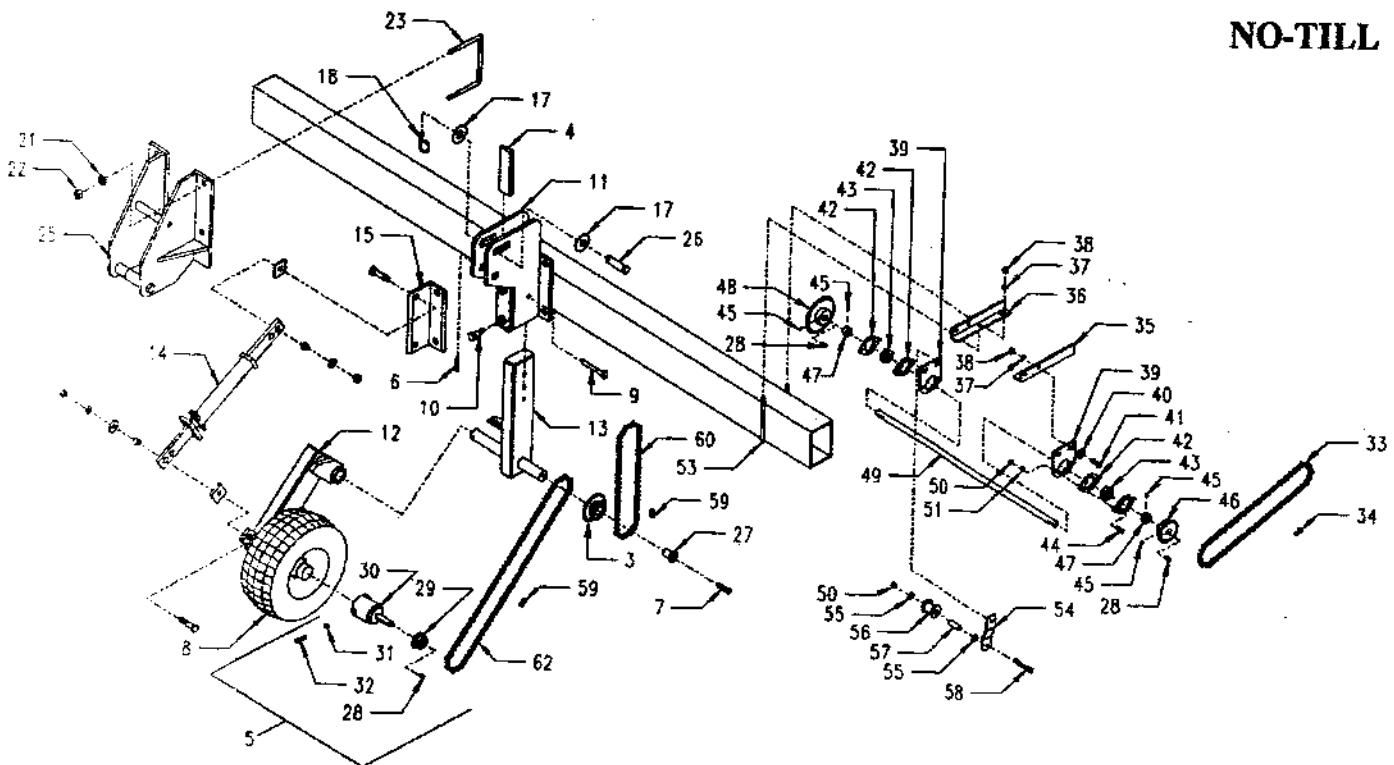
5' & 7' 3 PT DRIVE WHEEL



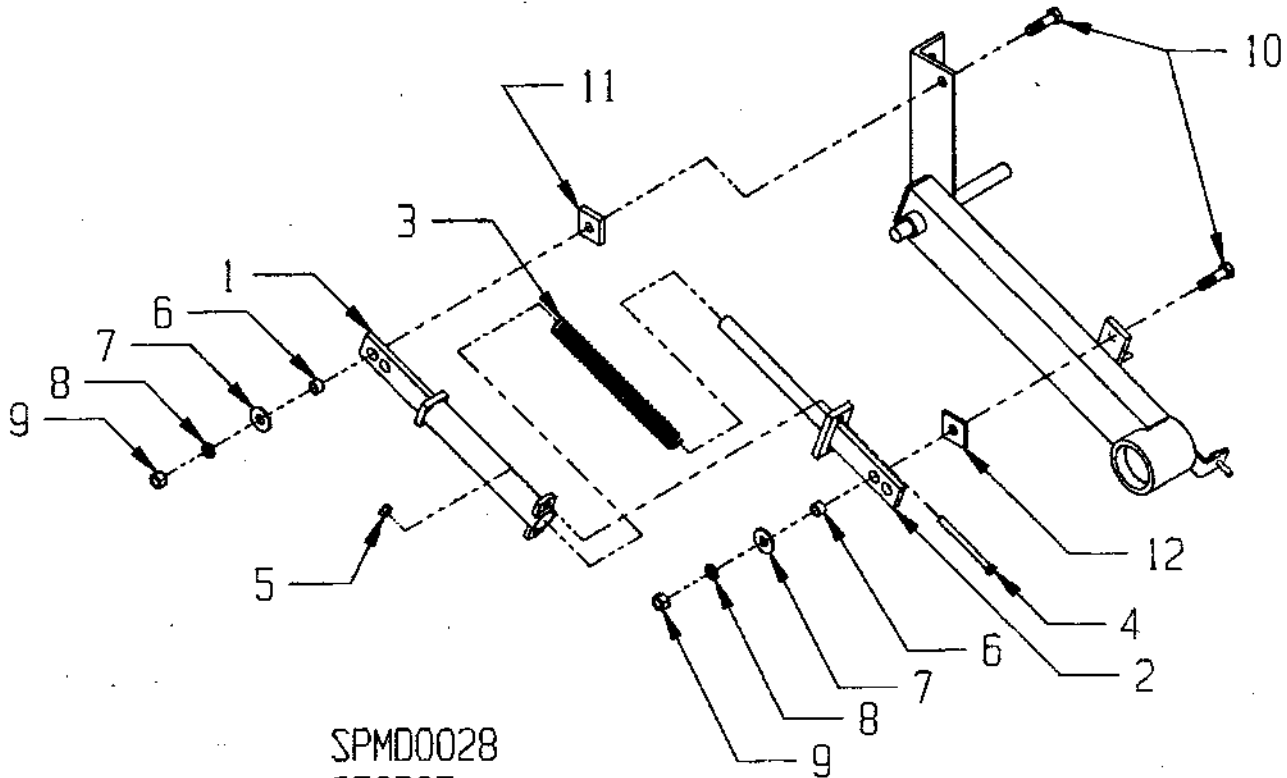
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CONVENTIONAL

NO-TILL



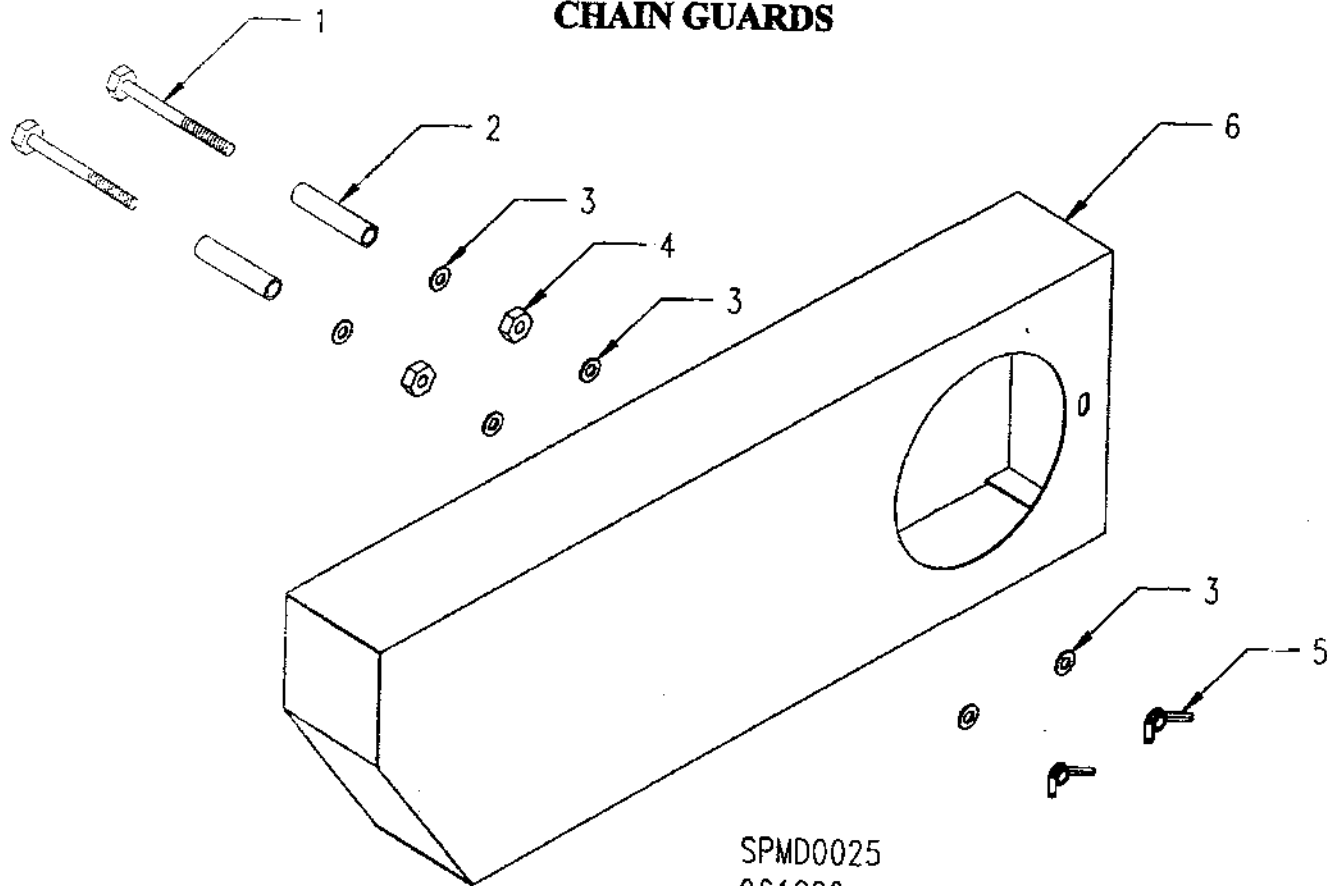
FLOATING DRIVE ARM ASSEMBLY



SPMD0028
970305

REF. #	PART #	QTY	DESCRIPTION
1	520343	1	Spring Cover FDA
2	520342	1	Spring Rod FDA
3	720007	1	80 lb. Pressure Spring
4	601141	2	7/16" X 5" Bolt
5	600011	2	7/16" Lock Nut
6	123068	2	Bushing
7	602016	2	5/8" Flat Washer
8	602015	2	5/8" Lock Washer
9	600014	2	5/8" Hex Nut
10	601056	2	5/8" X 2 1/4" Bolt
11	120498	1	Spacer 1/2"
12	120494	1	Spacer 1/4"
*	522420	1	Floating Drive Arm Assembly (Items 1-5)
*	522421	1	Floating Drive Arm Assembly w/ Hdw (Items 1-12)

CHAIN GUARDS



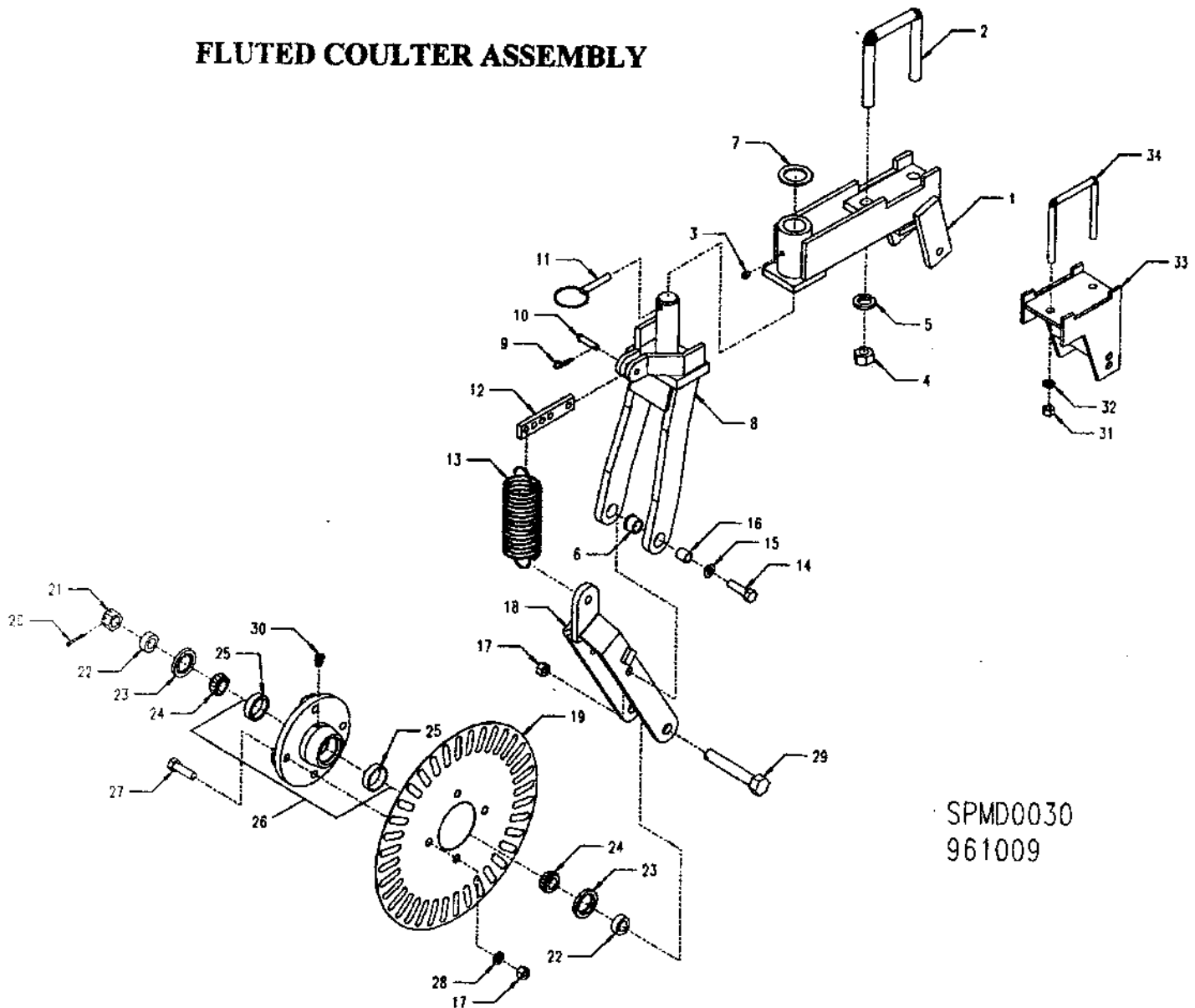
SPMD0025
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REF. #	PART #	QTY	DESCRIPTION
1	601121	A/R	3/8" X 5" Bolt
2	123152	A/R	4" Spacer
3	602009	A/R	3/8" Flat Washer
4	600003	A/R	3/8" Hex Nut
5	600027	A/R	3/8" Wing Nut
6	521169	1	Chain Guard - 3 Point Conv, Shown (Except 5' & 7')
6	521221	1	Chain Guard - 3 Point No - Till
6	521222	1	Chain Guard - Pull Type Conv
6	521223	1	Chain Guard - Pull Type No - Till
6	521220	1	Chain Guard PTNT w/ Fertilizer & Grass Seeder
6	521167	1	Chain Guard R.H. 3 - Point Conv. Drill w/ Grass Seeder
6	521211	1	Chain Guard L.H. 3 - Point Conv. w/ Grass Seeder except 5' & 7'
6	521224	1	Chain Guard 3 - Point Conv. w/ Native Grass Seeder
6	521168	1	Chain Guard Pull Type Conv w/ Grass Seeder
6	124345	1	Chain Guard 5' - 3 Point Conv, w/ Native Grass Seeder & G.S.
6	124343	1	Chain Guard 5' - 3 Point No Till w/ Native Grass Seeder & G.S.
6	521225	1	Chain Guard Pull Type Conv. w/ Native Grass Seeder
6	520879	1	Chain Guard HWT w/ Fertilizer
6	520880	1	Chain Guard HWT w/ Fertilizer And Grass Seeder
6	124306	1	Chain Guard Gear Driven Fertilizer
6	521226	1	Chain Guard HYD. Driven Fertilizer

FLUTED COULTER ASSEMBLY

REF. #	PART #	QTY	DESCRIPTION
1	520194	1	Hitch (Long) Shown
1	520193	1	Hitch (Short) Not Shown
2	624010	1	3/4" X 3 1/2" U-Bolt, 5" Long
3	609009	1	Grease Fitting
4	600004	2	3/4" Hex Nut
5	602006	2	3/4" Lock Washer
6	125007	2	Oilite Bushing
7	602031	1	Machine Bushing 2 1/4" O.D.
8	520192	1	Coulter Fork
9	604018	1	Small Hair Pin
10	604058	1	3/8" X 1 1/2" Headed Pin
11	604043	1	7/16" Lynch Pin
12	120285	1	Adjustment Strap
13	700013	1	Coulter Spring - 3/8" Dia Wire
14	601011	2	1/2" X 1 3/4" Bolt
15	602008	2	1/2" Flat Washer
16	103003	2	Swivel Bushing
17	600006	6	1/2" Lock Nut
18	520195	1	Coulter Yoke
19	701011	1	15" X 1 3/8" Fluted Coulter Blade
19	701012	1	15" X 3/4" Fluted Coulter Blade
19	701013	1	15" Ripple Coulter Blade
20	604124	1	5/32" X 1 1/2" Cotter Pin
21	600020	1	3/4" - 16 Castle Nut
22	103070	2	Bearing Spacer
23	703006	2	Grease Seal
24	702014	2	Taper Roller Bearing
25	702013	2	Bearing Race
26	522042	1	Coulter Hub And Race Assembly
27	601041	4	1/2" X 1 1/4" Bolt
28	602007	4	1/2" Lock Washer
29	105012	1	Spindle
30	609008	1	Grease Fitting
31	600011	2	7/16" Lock Nut
32	602012	2	7/16" Lock Washer
33	520124	1	Unit Hitch - No Coulter
34	624009	1	7/16" X 3 1/2" U-Bolt, 4 1/2" Long
*	1250078	1	Hitch Assembly - No Coulter (Items 31-34)
*	522051	1	Coulter Hub Assembly Complete (Items 23-26 & 30)
*	522263	1	Coulter Fork And Yoke Assembly (Items 6-18)
*	1250085	1	FCA 1 3/8" (Items 6-30)
*	1250086	1	FCA 3/4" (Items 6-30)
*	1250087	1	FCA Ripple (Items 6-30)
*	1250144	1	DFCA 1 3/8" Long (Items 1-30)
*	1250145	1	DFCA 1 3/8" Short (Items 1-30)
*	1250142	1	DFCA 3/4" Long (Items 1-30)
*	1250143	1	DFCA 3/4" Short (Items 1-30)
*	1250140	1	DFCA Ripple Long (Items 1-30)
*	1250141	1	DFCA Ripple Short (Items 1-30)

FLUTED COULTER ASSEMBLY

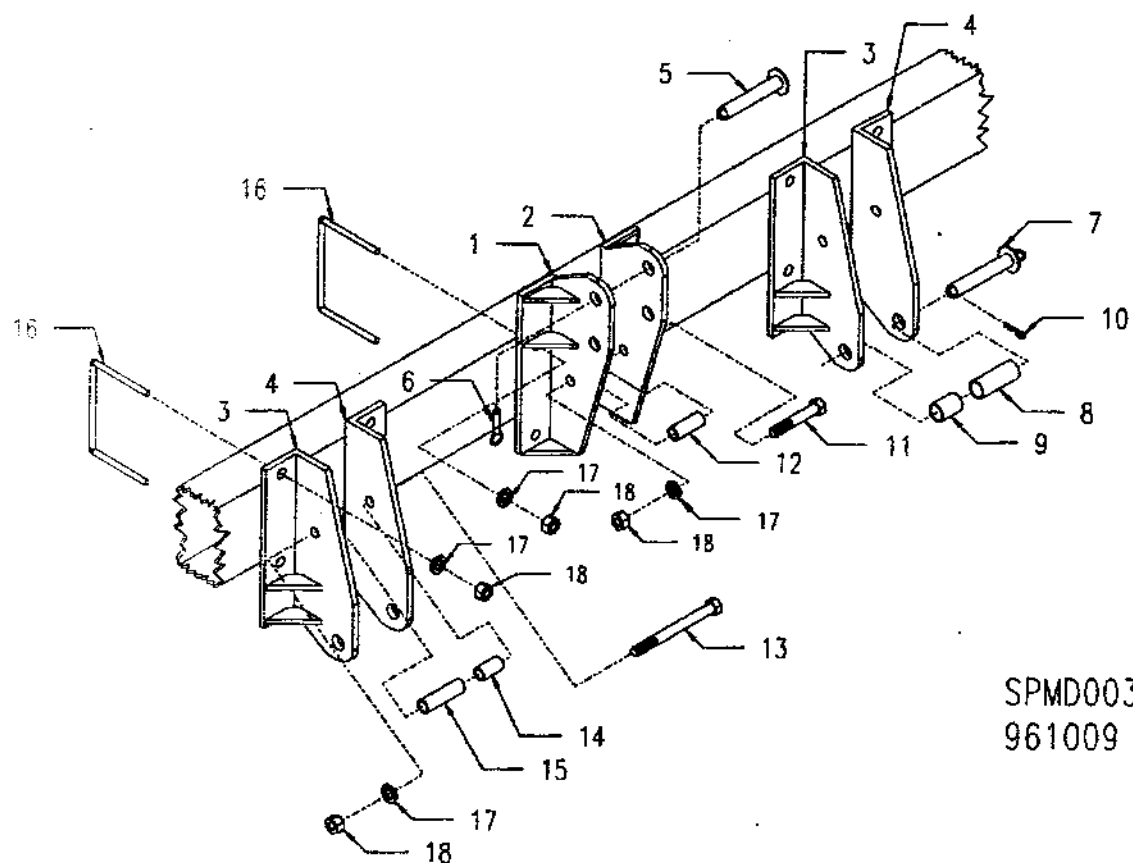


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HEAVY DUTY 3 PT HITCH ASS'Y

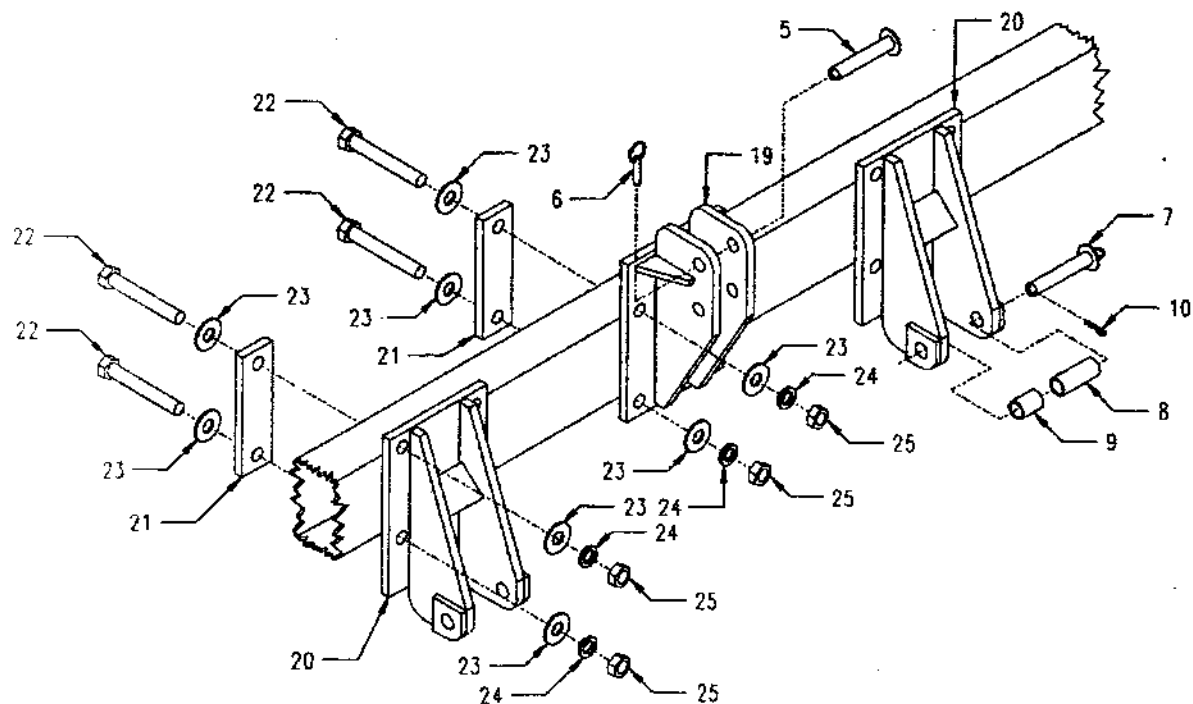
REF. #	PART #	QTY	DESCRIPTION
1	520154	1	Center Mast R.H.
2	520155	1	Center Mast L.H.
3	520156	2	Lower Arm R.H.
4	520157	2	Lower Arm L.H.
5	604040	1	Upper Link Pin
6	604043	1	7/16" Lynch Pin
7	604039	2	Hitch Pin CAT. # 2
8	103028	2	CAT. # 3 Bushing (3" Long)
9	103026	2	CAT. # 3 Bushing (2" Long)
10	604057	2	Large Hair Pin
11	601077	1	3/4" X 4 1/2" Bolt (7' N.T.)
11	601107	1	3/4" X 5" Bolt (10', 12', 14', 15', 20')
12	103072	1	Master Spacer, 2 3/4" Long (10', 12', 14', 15', 20')
13	601065	2	3/4" X 8" Bolt
14	103046	3	Spacer 2" Long
15	103047	2	Spacer 3 1/8" Long
16	604028	6	3/4" X 7" U-Bolt 5 1/2" Long
17	602006	15	3/4" Lock Washer
18	600004	15	3/4" Hex Nut
19	520411	1	Center Mast - Extra Heavy Duty Hitch
20	520410	2	Lower Arm - Extra Heavy Duty Hitch
21	120584	6	Bolt Plate - Extra Heavy Duty Hitch
22	601132	12	1" X 7" Hex Head Bolt
23	602039	24	1" Flat Washer
24	602028	12	1" Lock washer
25	600028	12	1" Hex Nut
*	522082	2	Lower Arm Assembly Complete
*	522075	1	Center Mast Assembly Complete For 14' & 20 Drills

HEAVY DUTY 3 PT HITCH

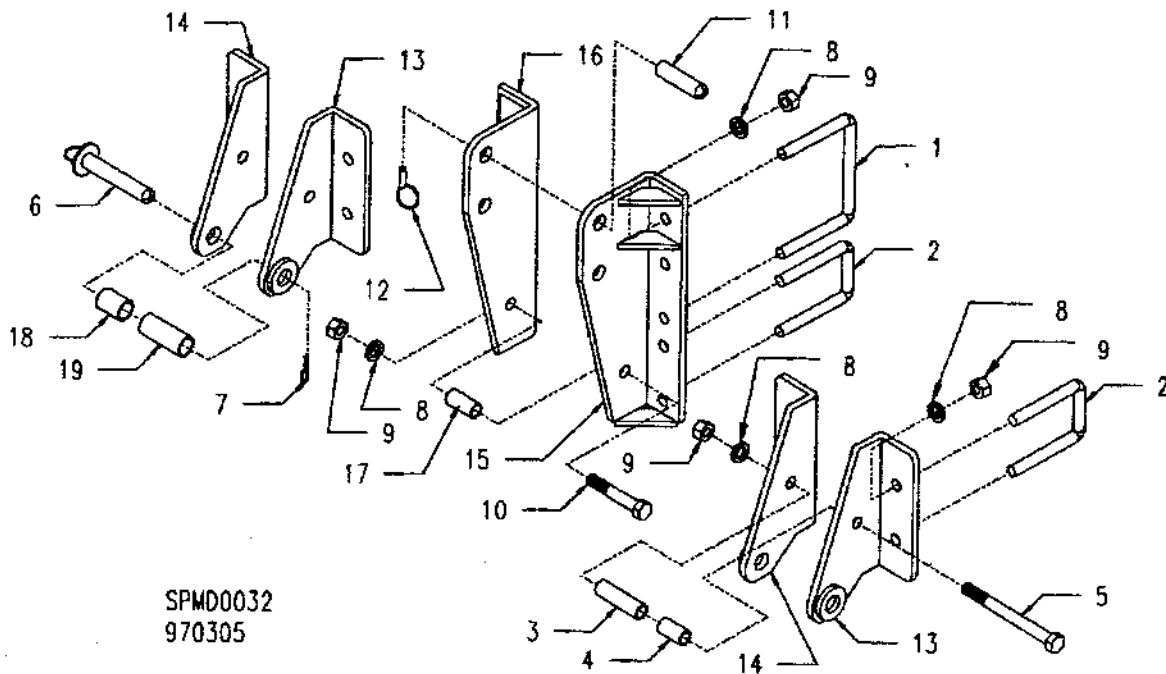


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EXTRA HEAVY DUTY 3 PT HITCH

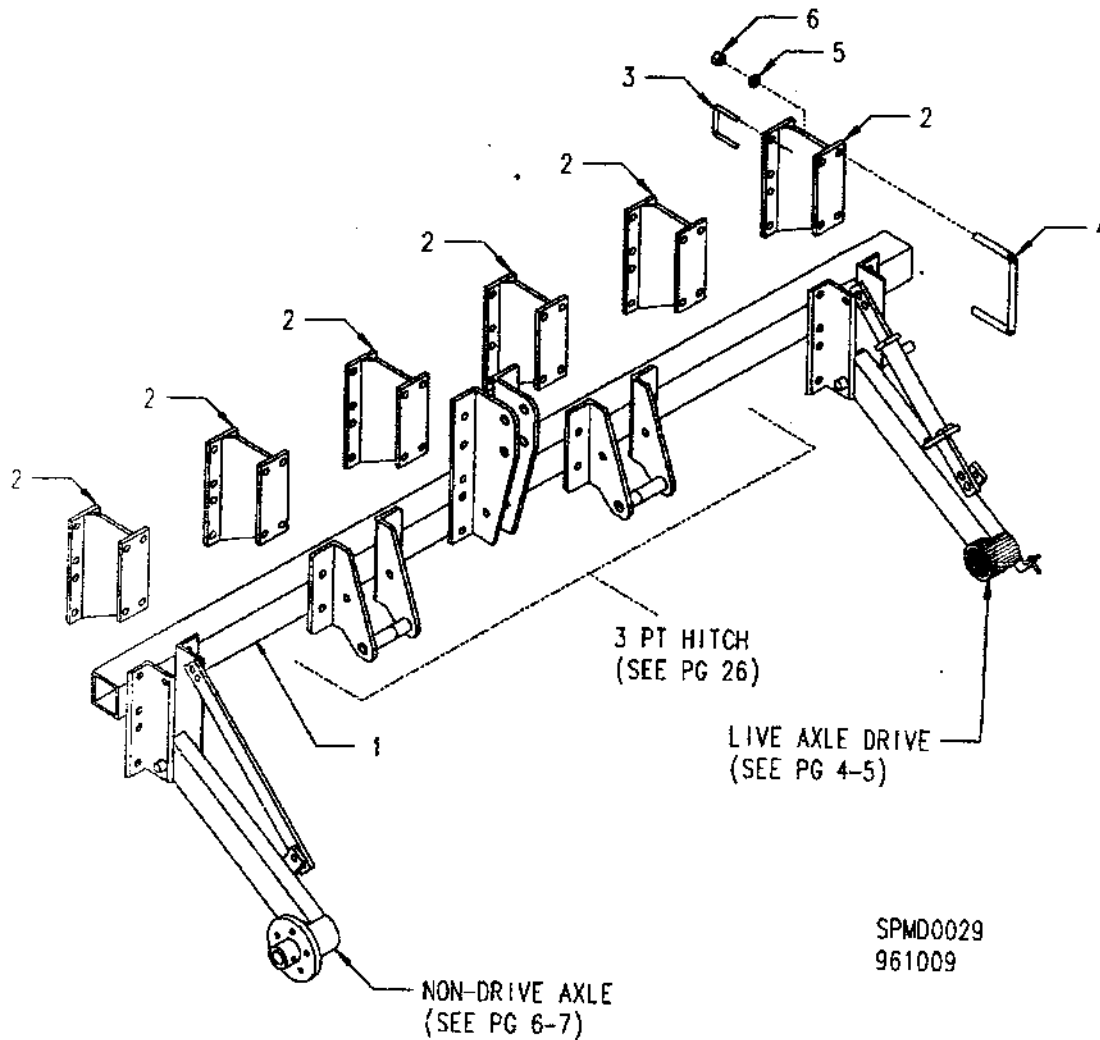


STANDARD 3 PT HITCH ASSEMBLY 10'-12'-14'-15'-20'-27'



REF. #	PART #	QTY	DESCRIPTION
1	604028	2	3/4" X 7" U-Bolt, 5 1/2" Long (27' Drill Only)
2	624010	6	3/4" X 3 1/2" U-Bolt, 5" Long (27' Drill Only)
2	624010	8	3/4" X 3 1/2" U-Bolt, 5" Long (10';12', 14';15';20' Drill)
3	103047	2	Spacer 3 1/8" Long
4	103046	2	Spacer 2" Long
5	601065	2	3/4" X 8" Bolt
6	604039	2	Hitch Pin CAT. #2
7	604057	2	Large Hair Pin
8	602006	19	3/4" Lock Washer
9	600004	19	3/4" Hex Nut
10	601077	1	3/4" X 4 1/2" Bolt
11	604040	1	Upper Link Pin
12	604043	1	7/16" Lynch Pin
13	520910	2	Hitch Lower Arm (Left Hand)
14	520911	2	Hitch Lower Arm (Right Hand)
15	520912	1	Center Mast (Left Hand)
16	520913	1	Center Mast (Right Hand)
17	103027	1	Master Spacer, 2 1/4" Long
18	103026	2	CAT. # 3 Bushing (2" Long)
19	103028	2	CAT. # 3 Bushing (3" Long)
*	522074	2	Lower Arm Assembly (Items 3-9, 13 & 14, 18 & 19)
*	522076	1	Center Mast Assembly (10', 14', 15', 20', 27' Drills)
*	522077	1	Center Mast Assembly - (27' Drills)
*	522086	1	3 PT. Hitch Assembly Complete - (27' Drills)
*	522015	1	3 PT. Hitch Assembly Complete - (10', 14', 15', 20', Drills)

NO-TILL SECONDARY BAR ASSEMBLY FOR 3 PT MACHINES

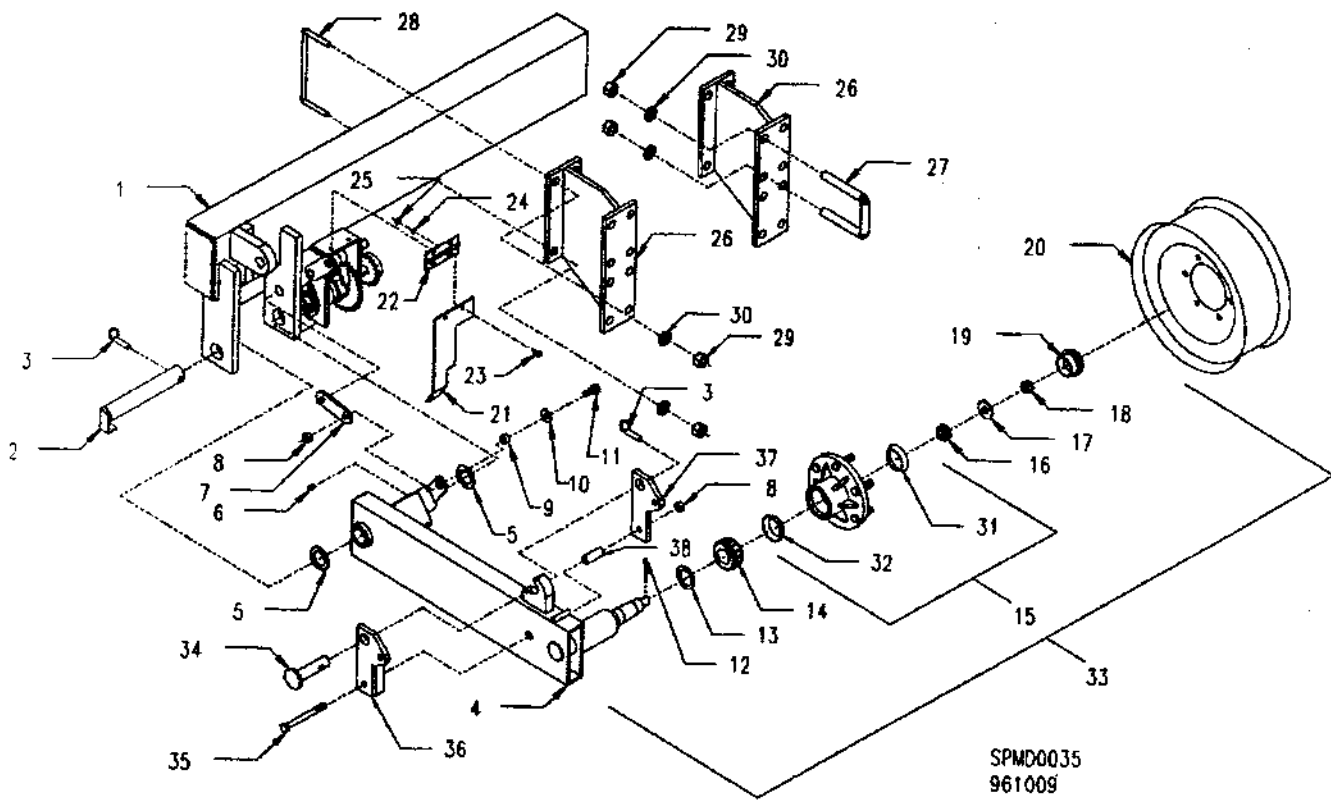


REF. #	PART #	QTY	DESCRIPTION
1	123698	1	Secondary Tool Bar 5' Drill
1	123043	1	Secondary Tool Bar 7' Drill
1	123202	1	Secondary Tool Bar 10' Drill
1	123468	1	Secondary Tool Bar 12' Drill
1	123049	1	Secondary Tool Bar 14' Drill
1	123196	1	Secondary Tool Bar 15' Drill
1	123080	1	Secondary Tool Bar 20' Drill
2	520069	2,4,6	Secondary Bar Bracket (5' & 7') (10' & 12') (14' & 15')
2	520161	8	Secondary Bar Bracket 20' Drill
3	624010	A/R	3/4" X 3 1/2" U-Bolt, 5" Long
4	604028	A/R	3/4" X 7" U-Bolt, 5 1/2" Long
5	602006	A/R	3/4" Lock Washer
6	600004	A/R	3/4" Hex Nut
*	520171	2,4,5,6	Secondary Bar Bracket R.H. Narrow Row (5' & 7') (10' & 12') (14') (15')
*	520172	2,4,5,6	Secondary Bar Bracket L.H. Narrow Row (5' & 7') (10' & 12') (14') (15')
*	520188	6	Secondary Bar Bracket R.H. Narrow Row 20'
*	520189	6	Secondary Bar Bracket L.H. Narrow Row 20'

END WHEEL ASSEMBLY, PT & PTNT (ALL)

REF #	PART #	QTY	DESCRIPTION	REF #	PART #	QTY	DESCRIPTION
1	521228	1	Tool Bar For 5'	15	522081	2	Hub Assy. (8-Bolt) (15' & 20' PTNT)
1	520084	1	Tool Bar For 7'	16	702014	2	Outer Bearing (5' & 7')
1	520286	1	Tool Bar For 10' PTNT	16	702014	2	Outer Bearing (All Others)
1	520758	1	Tool Bar For 12'	17	802027	2	5/8" SAE Flat Washer (5' & 7')
1	520149	1	Tool Bar For 14'	17	802013	2	3/4" SAE Flat Washer (All Others)
1	520284	1	Tool Bar For 15'	18	800022	2	5/8" - 18 Castle Nut (5' & 7')
1	520147	1	Tool Bar For 20'	18	800020	2	3/4" - 16 Castle Nut (All Others)
2	520077	2	Pivot Pin (5' & 7')	19	302007	2	Dust Cover (8-Bolt) (5' & 7')
2	520072	2	Pivot Pin (10', 12', 14', 15', 20')	19	302014	2	Dust Cover (8-Bolt) (10', 12', 14' PTNT, 15' & 20' PT)
3	804043	3	7/16" Lynch Pin (5', 7', 10', 12', 14')	19	302015	2	Dust Cover (8-Bolt) (15' & 20' PTNT)
3	804043	4	7/16" Lynch Pin (15', 20')	20	300004	2	Wheel 15 X 15 (8-Bolt) (5' & 7')
4	520103	1	End Wheel Arm R.H. (5' & 7' PT & PTNT)	20	300007	2	Wheel 8 X 15 (8-Bolt) (10', 12', 14' PTNT, 15' & 20' PT)
4	520280	1	End Wheel Arm L.H. (5' & 7' PT & PTNT)	20	300008	2	Wheel 8 X 15 (8-Bolt) (15' & 20' PTNT)
4	520108	1	End Wheel Arm R.H. (10', 12', 14' PTNT)	21	124025	1	Clutch Door - R.H.
4	520281	1	End Wheel Arm L.H. (10', 12', 14' PTNT)	21	124026	1	Clutch Door - L.H.
4	520282	1	End Wheel Arm L.H. (15' & 20' PT)	22	125004	A/R	Hinge
4	520284	1	End Wheel Arm R.H. (15' & 20' PT)	23	801087	A/R	1/4" X 5/8" Bolt
4	520283	1	End Wheel Arm L.H. (15' & 20' PT)	24	802002	A/R	1/4" Lock Washer
5	802031	4	Machine Bushing 2 1/2" OD	25	800001	A/R	1/4" Hex Nut
6	808008	2	Grease Fitting	26	520069	2,4,6	Secondary Bar Bracket - (5', 7', 10', 12', 14', 15')
7	120125	1	Clutch Link (5', 10', 12', 14')	26	520161	6,8	Secondary Bar Bracket - (20' PT & PTNT)
7	120125	2	Clutch Link (15' & 20')	27	624010	A/R	3/4" X 3 1/2" U-Bolt, 5' Long
8	800006	4	1/2" Lock Nut (5', 10', 12', 14')	28	804028	A/R	3/4" X 7" U-Bolt, 5 1/2" Long
8	800006	8	1/2" Lock Nut (15' & 20')	28	800004	A/R	3/4" Hex Nut
9	103002	2	Bushing (5', 7', 10', 12', 14')	30	802008	A/R	3/4" Lock Washer
9	103002	4	Bushing (15' & 20')	31	702013	2	Outer Race - (5' & 7')
10	802008	2	1/2" Flat Washer (5', 7', 10', 12', 14')	31	702018	2	Inner Race - (5' & 7')
10	802008	4	1/2" Flat Washer (15' & 20')	32	702016	2	Inner Race - (5' & 7')
11	601041	2	1/2" X 1 1/4" Bolt (5', 7', 10', 12', 14', 15')	32	702027	2	Inner Race (10', 12', & 14' PTNT; 15' & 20' PT)
11	601041	4	1/2" X 1 1/4" Bolt (20')	32	702028	2	Inner Race (15' & 20' PTNT)
12	601012	2	Cotter Pin 5/32" X 1 1/2" (5' & 7')	33	522043	2	Hub Assy. (5-Bolt) (Items 12-19, 31, 32)
12	604118	2	Cotter Pin 3/16" X 1 3/4" - (All Others)	33	522083	2	Hub Assy. (8-Bolt) (Items 12-19, 31, 32)
13	703002	2	Grease Seal 1 5/8" ID - (5' & 7')	33	522084	2	Hub Assy. (8-Bolt) (Items 12-19, 31, 32)
13	703003	2	Grease Seal 1 3/4" ID - (10', 12', 14' PTNT; 15' & 20' PT)	34	604040	A/R	Top Link Pin
13	703004	2	Grease Seal 2 1/4" ID - (15' & 20' PTNT)	36	601064	A/R	1/2" X 5" Bolt
14	702015	2	Inner Bearing (5' & 7')	36	520285	A/R	Cyl Guide LH (5', 7', 10', 12', 14' PT; 15' & 20' PTNT)
14	702022	2	Inner Bearing (10', 12', 14' PTNT, 15' & 20' PT)	36	520286	A/R	Cyl Guide LH (15' & 20' PT; 10', 14', 15', 20' PTNT)
14	702023	2	Inner Bearing (15' & 20' PTNT)	37	120425	A/R	Cyl Guide RH (5', 7', 10', 12', 14' PT; 5', 7' PTNT)
15	522024	2	Hub Assy. (5-Bolt) (5' & 7')	37	520287	A/R	Cyl Guide RH (15' & 20' PT; 10', 12', 14', 15', 20' PTNT)
15	522049	2	Hub Assy (8-Bolt) (10', 12', 14' PTNT; 15' & 20' PT)	38	123154	A/R	Spacer Bushing

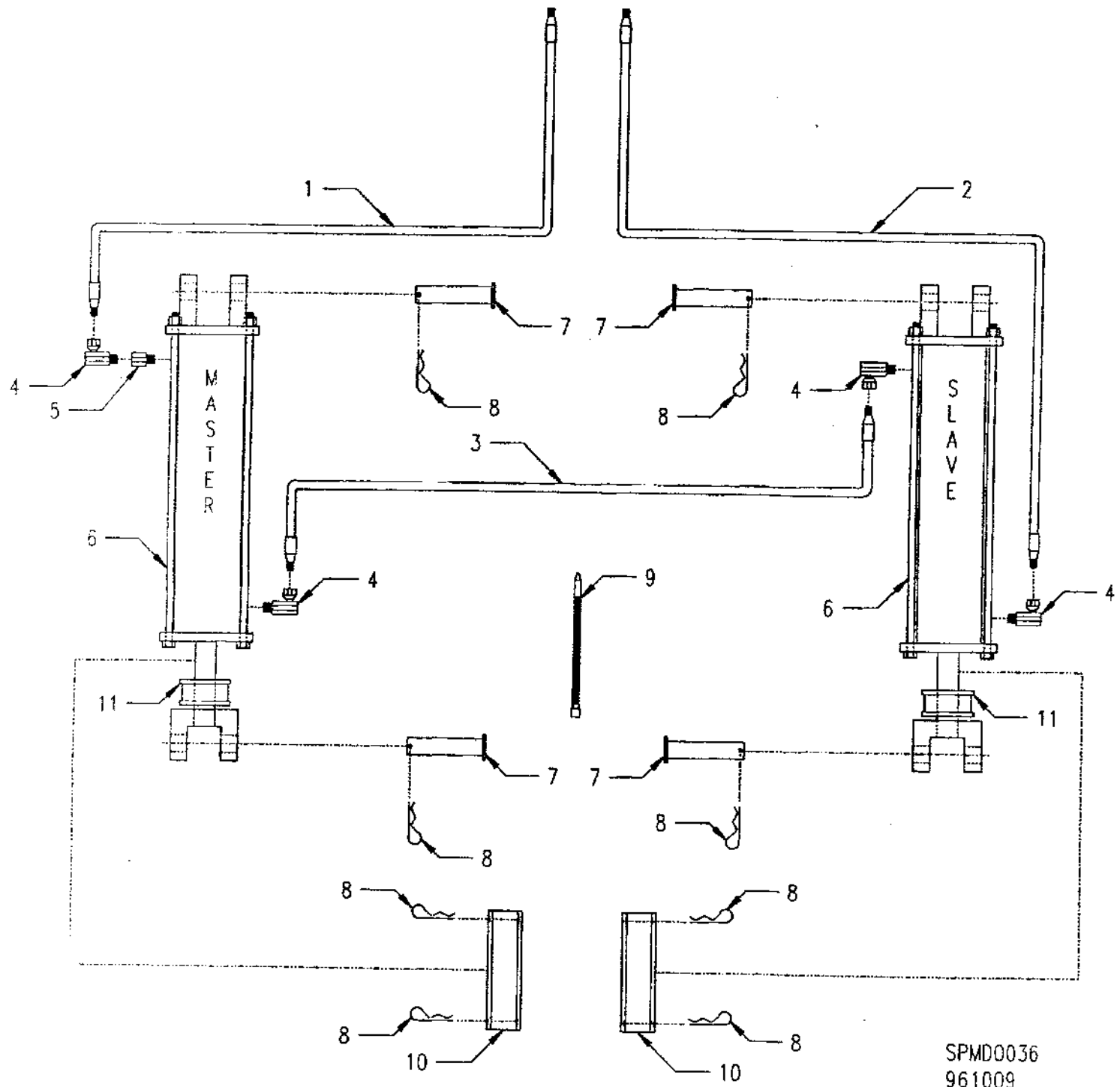
END WHEEL ASSEMBLY, PT & PTNT



PULL TYPE HYDRAULIC ASSEMBLY

REF. #	PART #	DESCRIPTION	5'	7'	10'	12'	14'	15'	20'
1	502224	1/2" X 14' Hydraulic Hose	1						
1	502225	1/2" X 15' Hydraulic Hose		1					
1	502227	1/2" X 19' Hydraulic Hose			1				
1	502228	1/2" X 20' Hydraulic Hose				1			
1	502229	1/2" X 21' Hydraulic Hose					1		
1	502230	1/2" X 22' Hydraulic Hose						1	
1	502232	1/2" X 24' Hydraulic Hose							1
2	502225	1/2" X 15' Hydraulic Hose	1						
2	502148	1/2" X 16' Hydraulic Hose		1					
2	502228	1/2" X 20' Hydraulic Hose			1				
2	502229	1/2" X 21' Hydraulic Hose				1			
2	502230	1/2" X 22' Hydraulic Hose					1		
2	502231	1/2" X 23' Hydraulic Hose						1	
2	502233	1/2" X 25' Hydraulic Hose							1
3	502190	1/2" X 9' Hydraulic Hose	1						
3	502191	1/2" X 11' Hydraulic Hose		1					
3	502234	1/2" X 13' Hydraulic Hose			1				
3	502225	1/2" X 15' Hydraulic Hose				1			
3	502148	1/2" X 16' Hydraulic Hose					1		
3	502199	1/2" X 18' Hydraulic Hose						1	
3	502231	1/2" X 23' Hydraulic Hose							1
4	604084	1/2" Swivel L	4	4	4	4	4	4	4
5	604111	Restrictor 1/2" X 3 / 32"	1	1	1				
5	604112	Restrictor 1/2" X 7 / 64"				1	1	1	1
6	502200	2 1/2" X 8" Rephasing Cyl .	1	1					
6	502201	2 3/4" X 8" Rephasing Cyl .	1	1	1	1			
6	502202	3" X 8" Rephasing Cyl .			1	1	1	1	
6	502203	3 1/4" X 8" Rephasing Cyl .					1	1	1
6	502204	3 1/2" X 8" Rephasing Cyl .							1
7	604067	Cylinder Pin	4	4	4	4	4	4	4
8	604057	Large Hair Pin	8	8	8	8	8	8	8
9	820007	Hose Strap	4	4	4	4	4	4	4
10	123064	Cylinder Lock	2	2	2	2	2	2	2
11	604170	Cylinder Stops 1 1/4" Wide	2	2	2	2	2	2	2

HYDRAULIC ASSEMBLY (PULL TYPE DRILL)

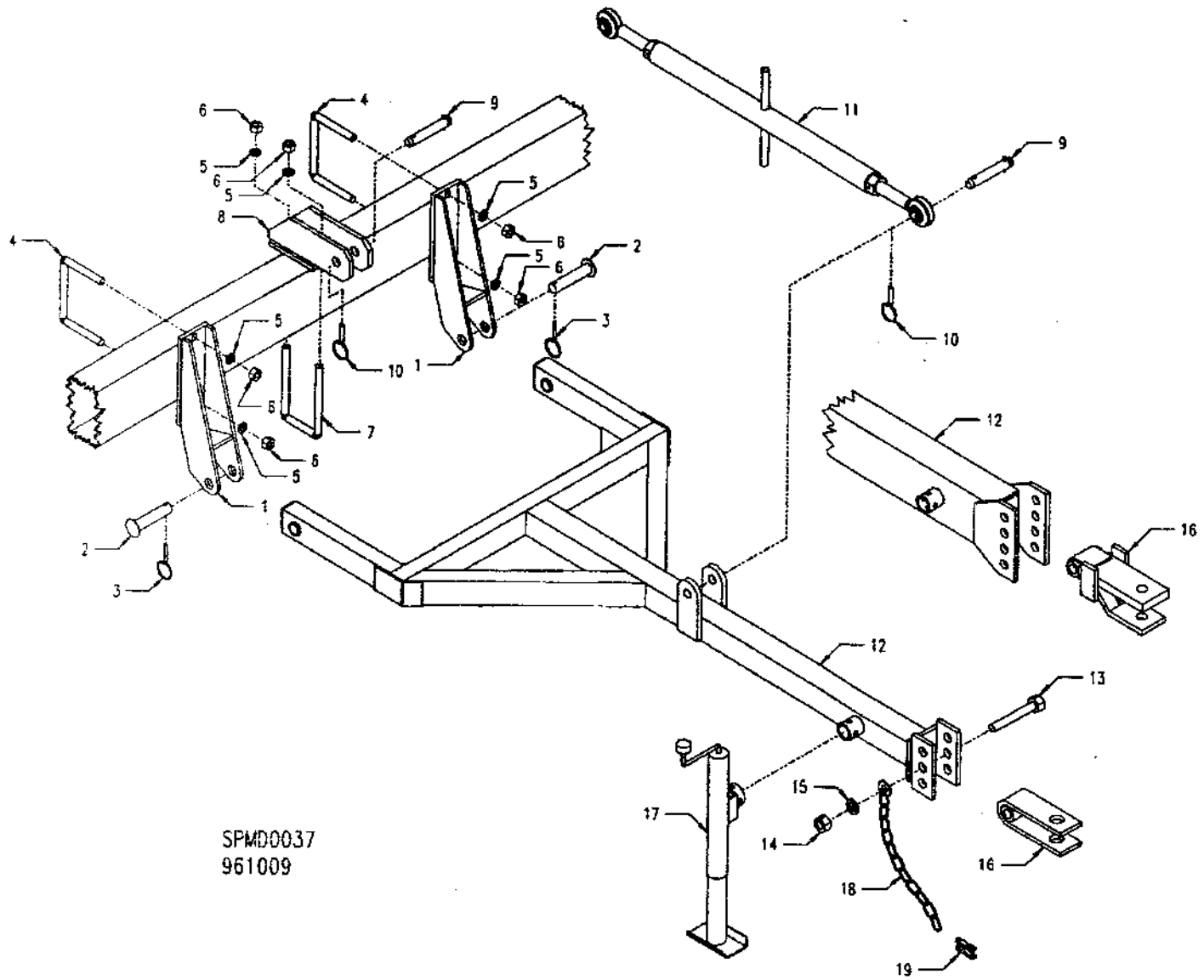


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TONGUE AND HITCH ASSEMBLY PT & PTNT

REF. #	PART #	QTY	DESCRIPTION
1	520151	2	Lower Arm (5' & 7')
2	521227	2	Hitch Pin 1 1/8" X 4 3/4" U.L.
3	604256	2	1/4" Lynch Pin
4	604028	2	3/4" X 7" U-Bolt, 5 1/2" Long
5	602006	6	3/4" Lock Washer
6	600004	6	3/4" Hex Nut
7	604029	1	3/4" X 4 1/8" U-Bolt, 8 1/2" Long
8	520152	1	Center Mast
9	604040	2	Upper Link Pin
10	604043	2	7/16" Lynch Pin
11	522555	1	Turn Buckle
12	520420	1	5' & 7' Tongue
12	520421	1	STD. Tongue (All 10', 12', 14' PT)
12	520353	1	Heavy Duty Tongue (10', 12', 14', 15', 20' NT)
13	601098	1	1" X 6" Bolt (5', 7', & Standard)
13	601132	1	1" X 7" Bolt (HD)
14	600028	1	1" Hex Nut
15	602028	1	1" Lock Washer
16	521161	1	Extended Tractor Hitch (5' & 7')
16	520224	1	HD Tractor Hitch
16	520417	1	Standard Tractor Hitch
17	522471	1	Tongue Jack
18	521232	1	Safety Chain
19	604257	1	Clevis
*	522108	1	Safety Chain Assembly
*	522705	1	3PT Hitch Assembly Items 1 - 10 (5' & 7')

TONGUE ASSEMBLY

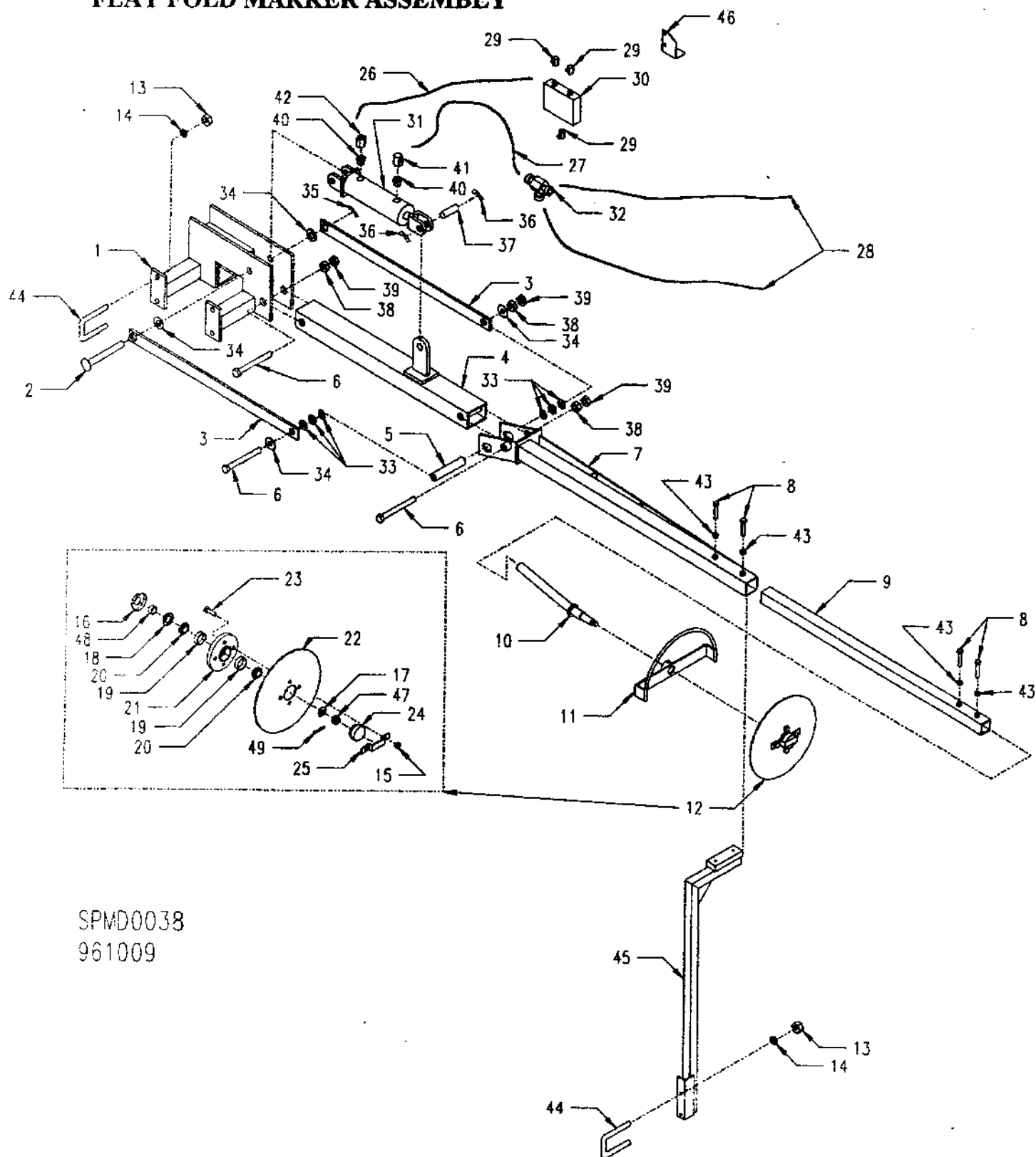


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PARTS LIST FOR FLAT FOLD MARKER ASSEMBLY

REV	PART #	QTY	DESCRIPTION	REV	PART #	QTY	DESCRIPTION
1	520974	1	Flat Fold Mounting Bracket RH (4" X 7")	24	302022	1	Dust Cover 2"
1	520975	1	Flat Fold Mounting Bracket LH (4" X 7")	25	121537	1	Bracket for Dust Cover
1	520967	1	Flat Fold Mounting Bracket RH (3 1/2" SQ.)	26	502115	1	3/8" X 8" Hydraulic Hose (12', Marker)
1	520969	1	Flat Fold Mounting Bracket LH (3 1/2" SQ.)	26	502161	1	3/8" X 9" Hydraulic Hose (15', Marker)
2	126915	1	Flat Fold Marker Cylinder Pin	26	502160	1	3/8" X 11" Hydraulic Hose (20' Marker)
3	121276	3	Flat Fold Marker Parallel Arm	27	502161	1	3/8" X 9" Hydraulic Hose (12' Marker)
4	520921	1	Cylinder Tube Lug Weldment	27	502116	1	3/8" X 10" Hydraulic Hose (15' Marker)
5	123613	1	Top Slide Bushing	27	502111	1	3/8" X 12" Hydraulic Hose (20' Marker)
6	601032	3	3/4" X 7" Bolt	28	502143	2	3/8" X 18" Hydraulic Hose (Coultter Caddy)
7	520931	1	12' Flat Fold Marker Arm LH	28	502141	2	3/8" X 6' Hydraulic Hose (3PT Conventional)
7	520932	1	12' Flat Fold Marker Arm RH	28	502164	2	3/8" X 7" Hydraulic Hose (3PT w/NT Coultters)
7	520924	1	15' Flat Fold Marker Arm LH	29	604091	3	3/8" 90(Swivel L)
7	520925	1	15' Flat Fold Marker Arm RH	30	502185	1	Hydraulic Sequence Valve
7	520922	1	20' Flat Fold Marker Arm RH	31	502124	1	3" X 8" Cylinder
7	520923	1	20' Flat Fold Marker Arm LH	32	604115	2	3/8" T Female-Female-Female
8	601063	4	1/2" X 2 1/2" Bolt	33	602013	6	SAE Flat Washer 3/4"
9	520933	1	12' Marker Arm Extension Arm Weldment	34	602035	4	Flat Washer 3/4"
9	520928	1	15' Marker Arm Extension Arm Weldment	35	604060	1	Cotter Pins 1/8" X 2"
9	520927	1	20' Marker Arm Extension Arm Weldment	36	604057	2	Large Hair Pin
10	520926	1	Disc Marker Extension Arm (12', 15')	37	604067	1	1" Cylinder Pin
10	521214	1	Disc Marker Extension Arm (20')	38	600004	3	3/4" Hex Nut
11	521261	1	Marker Blade Guard	39	600034	3	3/4" Jam Nut
12	522734	1	13" Blade Assembly	40	604054	2	3/8" Female to 1/2" Male Pipe Bushing
13	600004	6	3/4" Hex Nut	41	604114	1	3/8" Street L 90°
14	602006	6	3/4" Lock Washer	42	604111	1	Restrictor 1/2" X 3/32"
15	600006	4	1/2" Lock Nut	43	600005	4	1/2" Hex Nut
16	124376	1	Dust Shield	44	604028	2	3/4" X 7" U-Bolt, 5 1/2" Long
17	602063	1	Machine Bushing	44	604227	2	3/4" X 3 1/2" U-Bolt, 5 1/2" Long
18	703016	1	Seal	45	520920	2	Flat Fold Marker Stand (3 1/2" SQ. Bar)
19	702068	2	Bearing Cup	45	521023	2	Flat Fold Marker Stand (4" X 7" Bar)
20	702067	2	Bearing	46	124348	1	Mounting Bracket - Hyd Sequence Valve
21	502235	1	Hub	47	600020	1	3/4" Slotted Hex Nut
22	701032	1	14" Disc Blade	48	103076	1	Bushing
23	601011	4	1/2" X 1 3/4" Bolt	49	604258	1	1/16" X 3/4" Cotter Pin

FLAT FOLD MARKER ASSEMBLY

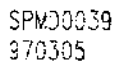


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PARTS LIST FOR 30' TRI - FOLD MARKER

REF. #	PART #	QTY	DESCRIPTION
1	601009	4	1/2" X 1 1/2" Bolt
2	602007	4	1/2" Lock Washer
3	602008	2	1/2" Flat Washer
4	600005	4	1/2" Hex Nut
5	600006	4	1/2" Lock Nut
6	601069	4	5/8" X 2 1/2" Bolt
7	602016	8	5/8" Flat Washer
8	602015	4	5/8" Lock Washer
9	600014	4	5/8" Hex Nut
10	600021	4	3/4" Lock Nut
11	602006	16	3/4" Lock Washer
12	604022	4	Cotter Pin 1/8" X 1"
13	624089	6	Cotter Pin 1/4" X 2 1/2"
14	604231	4	Coupling Pin For Cable
15	520999	8	Coupling Pin (Upper Arm To Middle Arm)
16	123696	2	Spacer For Latch
17	624144	4	Cable Connector
18	120954	2	Cable Arm
19	624143	2	Cable (74 1/2" Long)
20	521055	2	Extension Arm Weldment
21	521001	1	Upper Arm, Left
21	521008	1	Upper Arm, Right
22	521003	1	Middle Arm, Left
22	521005	1	Middle Arm, Right
23	521006	1	Lower Arm, Left
23	521000	1	Lower Arm, Right
24	521047	1	Mounting Bracket, Left
24	521119	1	Mounting Bracket, Left (7" Tool Bar)
24	521048	1	Mounting Bracket, Right
24	521120	1	Mounting Bracket, Right (7" Tool Bar)
25	520996	2	Mounting Bracket For Stop
26	520995	2	Adjustment Bracket For Stop
27	604028	6	U-Bolt 3/4" X 7", 5 1/2" Long
28	123695	4	Spacer For Lower Arm
29	120957	2	Spacer For Cable Arm
30	521002	2	Cylinder Mounting Bracket
31	120971	2	Safety Latch (Folded Position)
32	502197	2	2 X 20 Cylinder
33	604230	2	3/4" X 7 3/4" U-Bolt, 9 3/4" Long
34	700018	2	Spring For Stop
35	522734	1	Blade & Bearing Assembly
36	600004	12	3/4" Hex Nut
37	521261	1	Marker Blade Guard
38	521214	1	Disk Marker Extension Arm

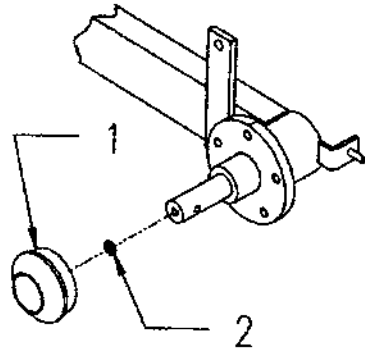
30' TRI-FOLD MARKER



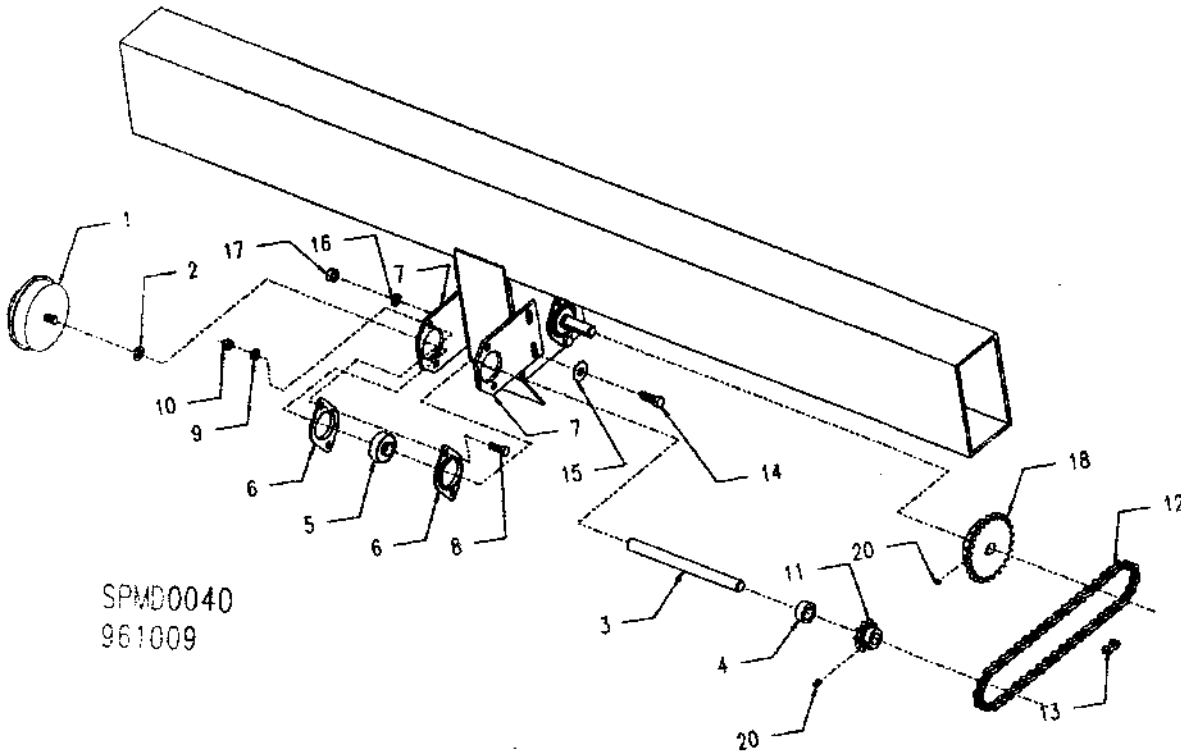
ACRE METERS

REF. #	PART #	QTY	DESCRIPTION
1	325012	1	Acre Meter 7' 3PT
1	325025	1	Acre Meter 7' PT
1	325020	1	Acre Meter 10'
1	325056	1	Acre Meter 12'
1	325013	1	Acre Meter 14'
1	325021	1	Acre Meter 15'
1	325014	1	Acre Meter 20'
1	325015	1	Acre Meter 27'
1	325022	1	Acre Meter 30'
2	602007	1	1/2" Lock Washer
3	126047	1	Jack Shaft
4	702021	2	Lock Collar
5	702002	2	Self Aligning Bearing
6	105018	4	2 Hole Flangette
7	100151	2	Bearing Holder
8	601047	4	3/8" X 1" Bolt
9	602005	4	3/8" Lock Washer
10	600012	4	3/8" Lock Nut
11	325023	1	#40 B - 10 Tooth Sprocket
12	624060	1	#40 Chain 1 - 47 Links
13	624003	1	#40 Connecting Links
14	601033	4	7/16" X 1 1/4" Bolt
15	602010	4	7/16" Flat Washer
16	602012	4	7/16" Lock Washer
17	600011	4	7/16" Lock Nut
18	325024	1	#40B - 25 Tooth Sprocket
19	601096	1	1/4" - 20 X 1/4" Set Screw
*	1250051	1	Acre Meter Assembly 7' 3PT.
*	1250053	1	Acre Meter Assembly 10' 3PT.
*	1250292	1	Acre Meter Assembly 12' 3PT
*	1250055	1	Acre Meter Assembly 14' 3PT.
*	1250057	1	Acre Meter Assembly 15' 3PT.
*	1250059	1	Acre Meter Assembly 20' 3PT.
*	1250061	1	Acre Meter Assembly 27' 3PT.
*	1250052	1	Acre Meter Assembly 7' PT
*	1250054	1	Acre Meter Assembly 10' PT
*	1250348	1	Acre Meter Assembly 12' PT
*	1250056	1	Acre Meter Assembly 14' PT
*	1250058	1	Acre Meter Assembly 15' PT
*	1250060	1	Acre Meter Assembly 20' PT
*	1250062	1	Acre Meter Assembly 30' - 3 Section
*	1250563	1	Acre Meter Assembly 5'

3-PT ACRE METER



PULL TYPE ACRE METER



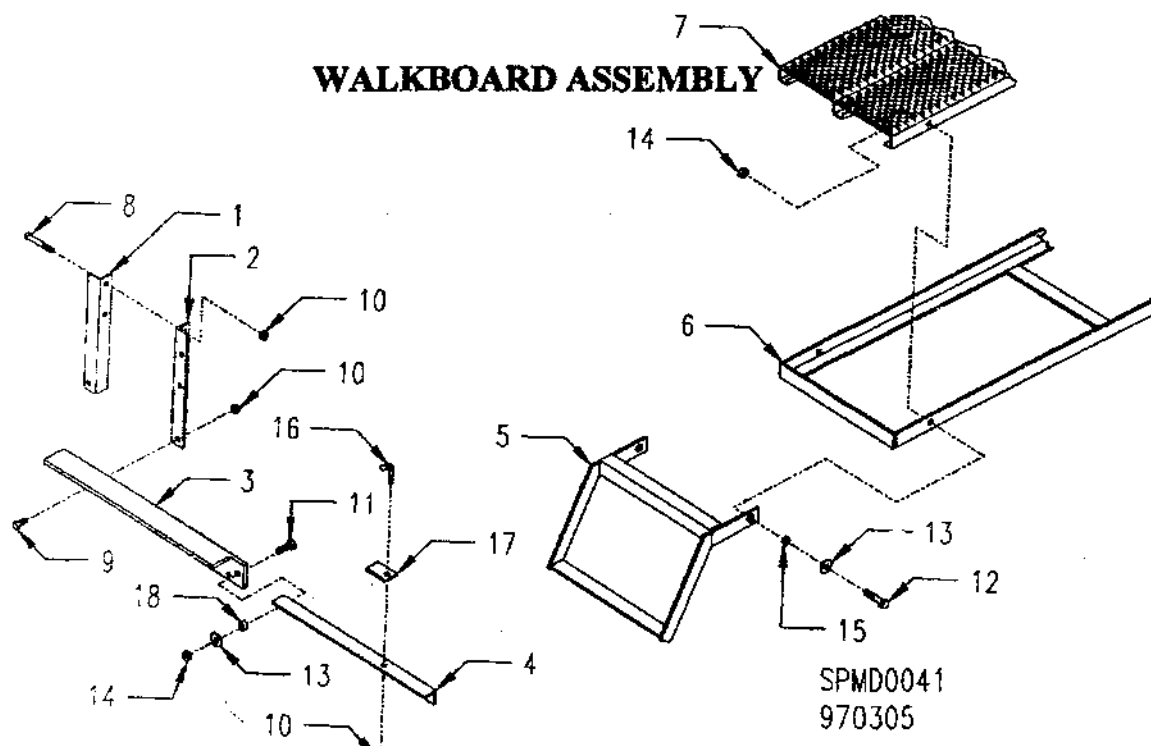
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PT CHAIN IDLERS

SPMD0033
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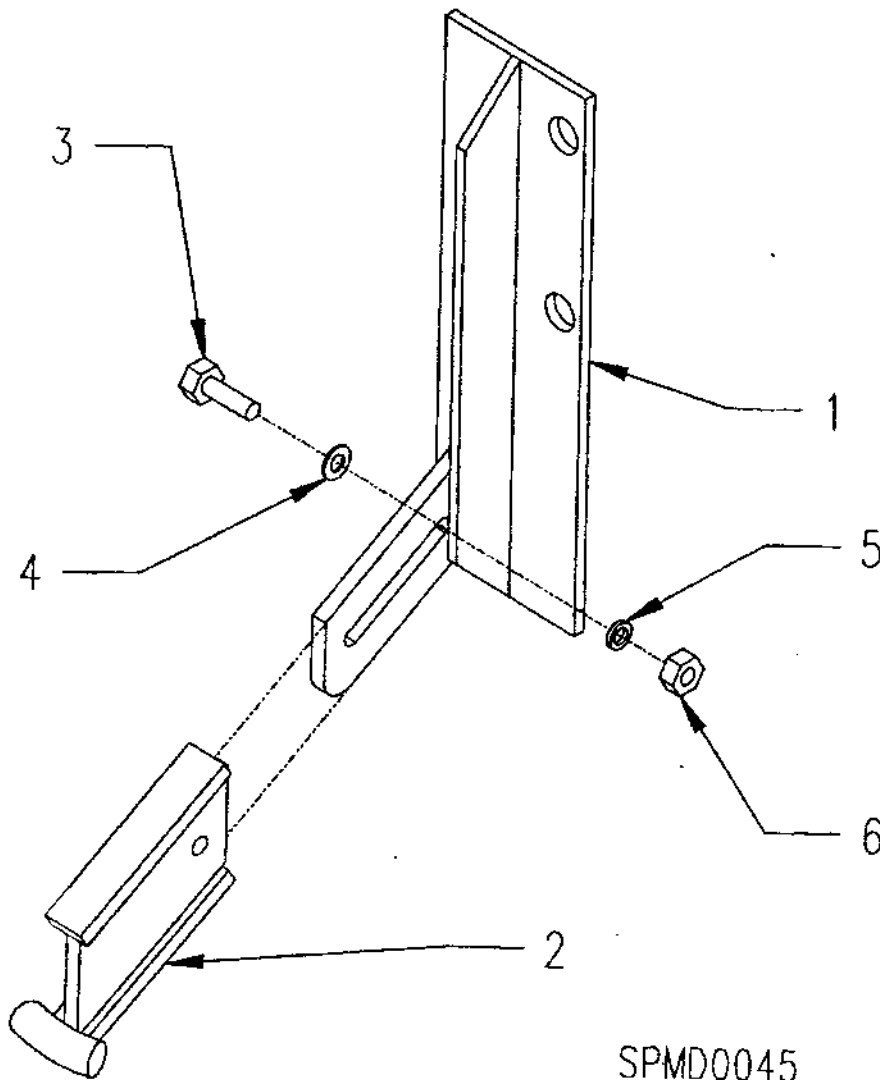
REF. #	PART #	QTY	DESCRIPTION
1	120488	1	Idler Arm (Clutch)
2	120245	1	Idler Arm (Hopper)
3	601084	2	3/8" X 3" Bolt
4	123626	2	Bushing - 3/8" ID X 2"
5	400015	2	Chain Roller
6	602009	6	3/8" Flat Washer
7	602005	3	3/8" Lock Washer
8	600003	3	3/8" Hex Nut
9	601025	1	3/8" X 1 1/4" Bolt
10	124256	1	Idler Spring Strap
11	601006	1	3/8" X 1 1/2" Bolt
12	700007	1	Idler Spring
13	600012	1	3/8" Lock Nut
14	600005	1	1/2" Lock Washer
16	125043	1	Oilite Bushing - 1/2" Long
17	103077	1	Swivel Bushing - 9/16" Long
18	602008	1	1/2" Flat Washer
19	601011	1	1/2" X 1 3/4" Bolt

WALKBOARD ASSEMBLY



REF. #	PART #	QTY	DESCRIPTION
1	122106	A/R	Walkboard Hanger, Front
2	122105	A/R	Walkboard Hanger, Rear
3	122139	1	Double Wide Walkboard Mounting Angle - Extended
3	122136	1	Double Wide Folding Walkboard Mounting Angle - Standard
4	122137	1	Double Wide Walkboard Support Angle
5	521219	1	Folding Step
6	521255	1	5' Walkboard Frame
6	521256	1	7' Walkboard Frame
6	521257	1	10' Walkboard Frame
6	521258	1	12' Walkboard Frame
6	521259	1	14' Walkboard Frame
6	521252	1	15' Walkboard Frame
6	521260	1	20' Walkboard Frame
6	521274	1	10' Walkboard Frame - Pull Type
6	521262	1	7' Walkboard Frame - Pull Type
6	521275	1	14' Walkboard Frame - Pull Type
6	521282	1	15' Walkboard Frame - Pull Type - NT
7	125040	1	5 Walkboard
7	125038	1	7' Walkboard
7	125035	1	10' Walkboard
7	125037	1	12' Walkboard
7	125039	1	14' Walkboard
7	125034	1	15' Walkboard
7	125036	1	20' Walkboard
8	601029	A/R	7/16" X 3" Hex Bolt
9	601010	A/R	7/16" X 1" Hex Bolt
10	600011	A/R	7/16" Lock Nut
11	601009	A/R	1/2" X 1 1/2" Hex Bolt
12	601063	A/R	1/2" X 2 1/2" Hex Bolt
13	602008	A/R	1/2" Flat Washer
14	600006	A/R	1/2" Lock Nut
15	103004	2	Small Swivel Spacer
16	601235	A/R	7/16" J-Bolt
17	121551	A/R	1/4" Spacer Plate
18	103002	A/R	Medium Swivel Spacer

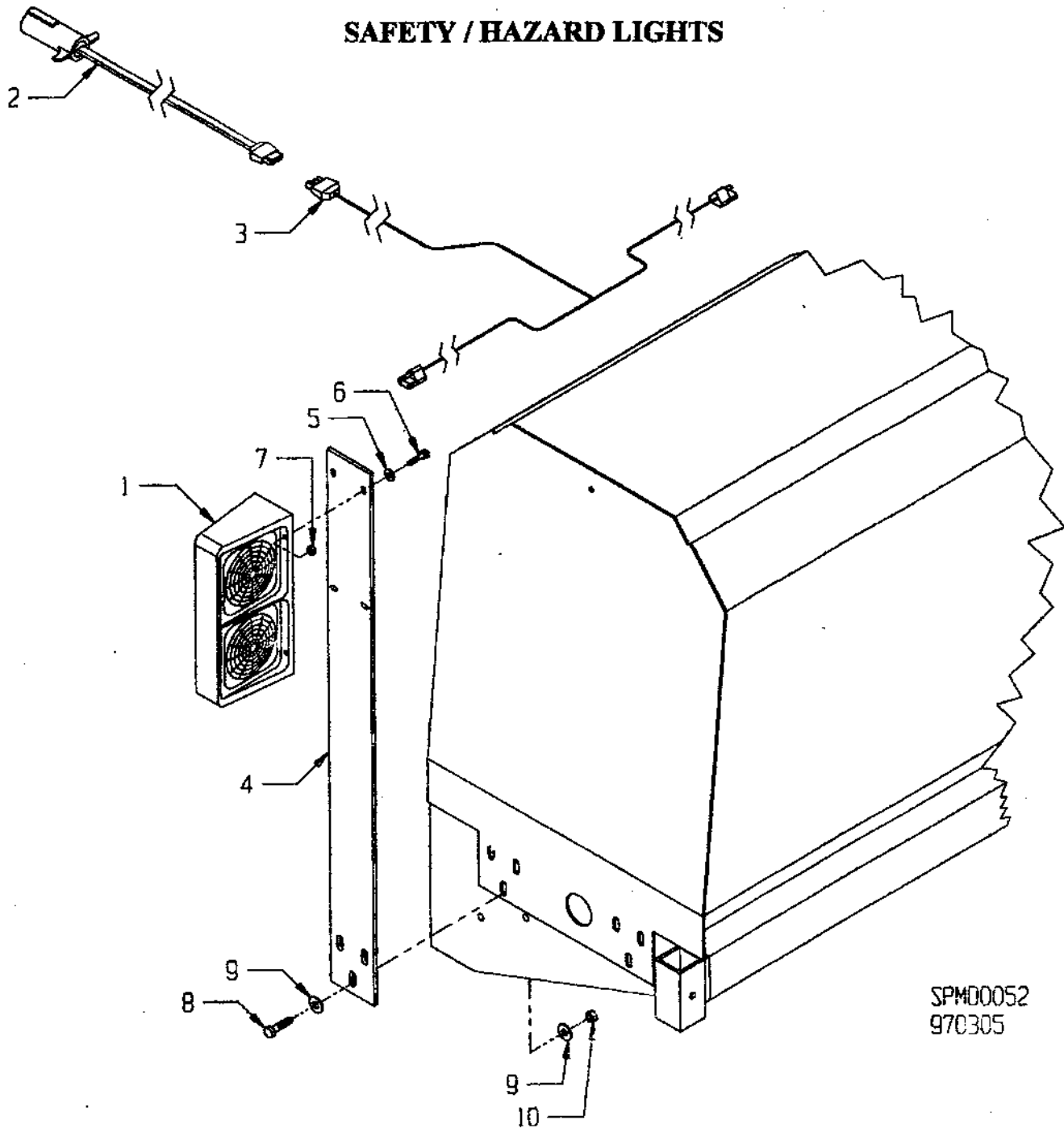
WHEEL BRAKE ASSEMBLY



SPMD0045
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REF. #	PART #	QTY	DESCRIPTION
1	520953	1	Wheel Brake Mounting Plate RH
1	520950	1	Wheel Brake Mounting Plate LH
2	520952	1	Adjustable Brake Bar RH
2	520951	1	Adjustable Brake Bar LH
2	521266	1	Adjustable Brake Bar L.H. - No Till
3	601025	1	3/8" X 1 1/4" Bolt
4	602009	1	3/8" Flat Washer
5	602005	1	3/8" Lock Washer
6	600003	1	3/8" Hex Nut

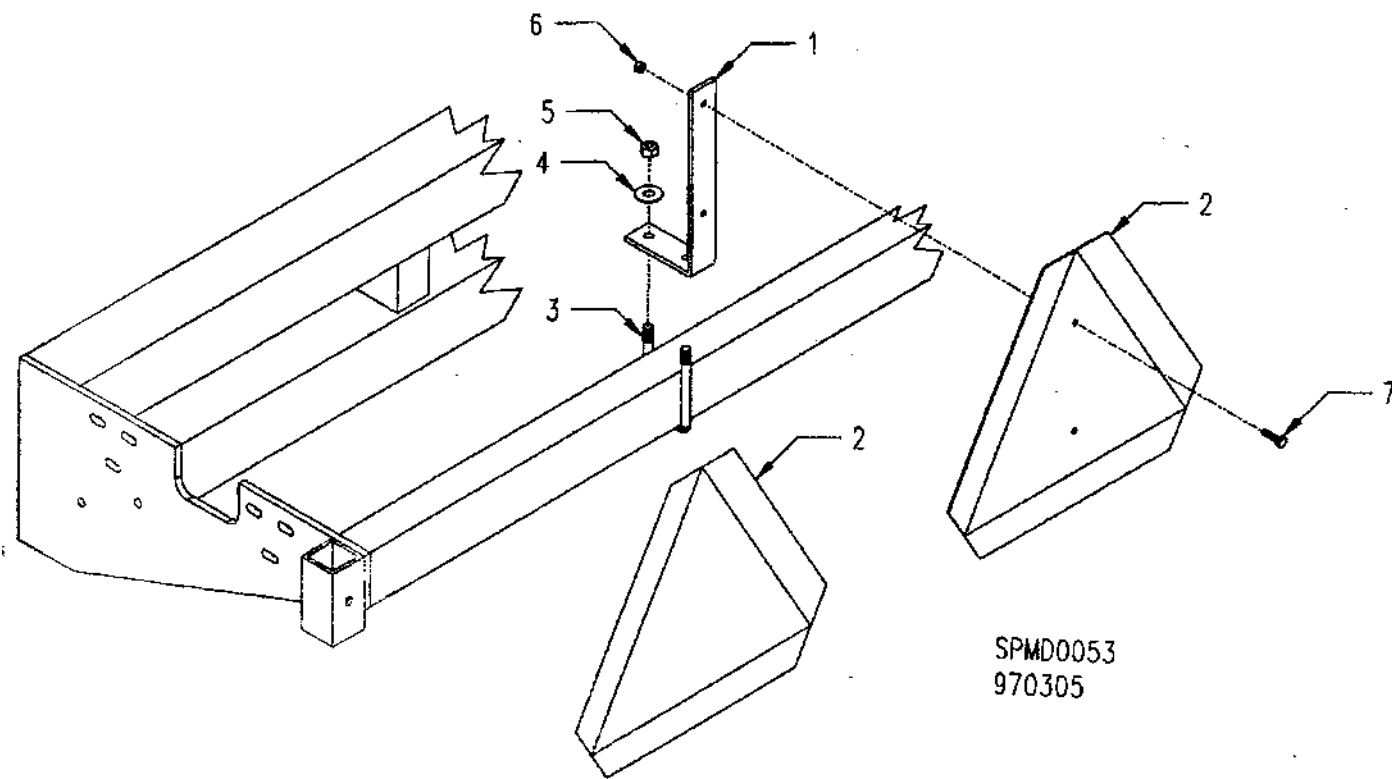
SAFETY / HAZARD LIGHTS



SPM00052
970305

REF. #	PART #	QTY	DESCRIPTION
1	522753	2	Safety / Hazard Light
2	522751	1	Wiring Harness - Tractor Plug
3	522752	1	Wiring Harness - T
4	121481	2	Light Bracket
5	602011	8	1/4" Flat Washer
6	601204	8	1/4" X 1 1/4" Bolt
7	600044	8	1/4" Flange Lock Nut
8	601006	6	3/8" X 1 1/2" Bolt
9	602009	12	3/8" Flat Washer
10	600012	6	3/8" Lock Nut

SLOW MOVING VEHICLE SIGN



REF. #	PART #	QTY	DESCRIPTION
1	120921	1	SMV Mounting Bracket
2	624142	1	SMV Sign - Metal
2	624141	1	SMV Sign - Sticker
3	624012	1	7/16" X 2" U-Bolt 4 1/4" Lg
4	602010	2	7/16" Flat Washer
5	600011	2	7/16" Nylon Lock Nut
6	600044	2	1/4" Flange Lock Nut
7	601080	2	1/4" X 1" Bolt